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PRESENT PHILOSOPHICAL TENDENCIES

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PRESENT PHILOSOPHICAL TENDENCIES

A critical survey of Naturalism, Idealism, Pragmatism
and Realism, together with a synopsis of the
philosophy of William James

BY RALPH BARTON PERRY

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FOREWORD

When the first edition of this work was published in 1912, its classification of schools was fairly true to the ways of philosophizing characteristic of Europe and America just prior to the First World War. The "idealism" which had sprung from Kant as a reaction against the British school of Locke, Berkeley, and Hume had passed its crest and begun to lose the influence which it had enjoyed at the close of the century. Its academic authority had been so great that in the minds of French, English, and American students it was identified with philosophy itself, or, at any rate, with philosophy in the dignitative sense. The reaction against idealism began in Germany and England and was inspired by the teachings of natural science and, in particular, the rise and vogue of the evolutionary philosophy of Herbert Spencer and Charles Darwin. Neither of these thinkers was a philosopher in the strict sense. They were not logicians, metaphysicians or philosophical technicians, nor was either a physical scientist in the strict sense. But they employed and defended the scientific way of thinking, and they and their followers were aligned against the followers of Kant, whose *a priori* methods they rejected.

Both Darwin and Spencer exercised a profound influence on Continental European thought. Both employed the method of observation which they believed characterized natural science, but Darwin, using his own biological theory of natural selection, attached more importance to the active and inventive role of natural science and became one of the forerunners of pragmatism and instrumentalism; whereas

Spencer, on the whole, moved along the line of Locke and British empiricism. This, then, is the European philosophical complex in the period of the First World War: *first*, idealism still in the ascendant in Europe and America, but losing its prestige; *second*, the naturalistic or materialistic philosophy stimulated by natural science and most conspicuously in evidence in Germany and England; *third*, a philosophy of will and action which sought to find a compromise position between natural science and traditional metaphysics.

During the period covered by the present book the main cleavage was still between the speculative philosophy which followed the line of the seventeenth century and the empirical philosophies which emulated science and commonsense. This is still the main cleavage, and no doubt will remain so. There is the bolder and looser philosophy which abandons itself more freely to the quest for philosophical truth, and which is consummated in a system in which the ancient problems find their solution in a rounded system, and there is the stricter and more sceptical philosophy which follows the line of doubt, and which may terminate in a rejection of the problems themselves. Over against the extreme of sceptical doubt, which has recently been enjoying a wide vogue under the name of "positivism", stands the opposite extreme originating, as might have been expected, in Continental Europe, and known as "existentialism". Meanwhile the English philosophers, with characteristic intellectual economy, have been limiting themselves to the study of language and method, leaving the exploration of the murky depths of metaphysics to the French and the German followers of the Danish Kierkegaard and the German Hüsserl. These are the areas of philosophical thought that would need to be brought into view to bring up to 1955 a survey of European and American thought originally published in 1912.

RALPH BARTON PERRY

Cambridge, 1955

PREFACE

To avoid any misunderstanding as to the scope of the present book, let me say at the outset that with the exception of the Appendix, it is a critique, rather than a history. I have attempted not merely to summarize, but to estimate, present philosophical tendencies; and my criticism is throughout based on the realistic philosophy which I set forth constructively only at the end.

Since my method has been critical rather than expository I shall doubtless be charged with having committed the *error personae*, with having attributed to certain writers views which they would not recognize as their own. Be this as it may, I have in any case formulated the views which I have criticised, so that *the merits of the question* may always be in the foreground of study. I have assumed it to be more important to discover whether certain current views were true or false than to discuss with painstaking nicety the question of their attribution.

Furthermore, I realize that I have given to the several tendencies which I have discussed the relative emphasis which is characteristic of Anglo-American thought. This appears in the importance which I have attached to the blend of "critical" or Kantian, with metaphysical or Hegelian motives in idealism; in my identification of realism with the "new" or non-dualistic realism; and in the prominence which I have given both to realism and to pragmatism. The difference in respect of distribution and emphasis between an Anglo-American and a Continental survey of contemporary philosophy may be observed from a comparison of the present volume with Ludwig Stein's excellent book, *Die Philosophische Strömungen der Gegenwart.*

Portions of the present book are reprinted from periodicals; and I have made due acknowledgment in the proper places. I desire also gratefully to acknowledge the help of my friends Professor E. B. Holt, Professor E. G. Spaulding, Dr. M. P. Mason, Dr. H. M. Sheffer, and Dr. Günther Jacoby.

RALPH BARTON PERRY.

CAMBRIDGE, September, 1911.

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Dedicated to the Dear and Revered Memory of
WILLIAM JAMES

PART I

INTRODUCTION

PRESENT PHILOSOPHICAL TENDENCIES

CHAPTER I

PHILOSOPHICAL THEORY AND ESTABLISHED BELIEF[1]

Discrepancy between Theory and Belief

§ 1. It is impossible to undertake a summary of philosophical tendencies without being sensible of the breach between the philosophy of the schools and the philosophy of the streets, between the latest speculations, hypotheses, and definitions of critical experts, and the general beliefs of mankind. This discrepancy is not peculiar to philosophy. There is a similar difference between pure science and popular science, between political theory and political faith or tradition. But in neither case is the difference so confusing or disturbing as in the case of philosophy. Confusion between pure and popular science is avoided by the development of an organized technique, which makes pure science largely unintelligible to the layman; and there is little danger of a premature application of scientific hypotheses, because of the material difficulties which must be overcome before any such hypothesis can be applied. The same holds, although much less certainly, of politics. Political action is based on the steady and widespread acceptance, within a community, of certain general beliefs that are not immediately affected by the fluctuations of theory. And here also the application of theory must, except under extraordinary conditions, move at a slow pace because of the complexity of the instrumentalities employed.

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[1] Reprinted, with additions and alterations, from an article entitled "Theories and Beliefs," *Harvard Theological Review*, Vol. III, July, 1910.

It may be argued that the common philosophical beliefs are similarly protected and rendered stable by their wide interpenetration with social interests, and by the authority of established religion. But the fact remains that a philosophical revolution is more easily accomplished than a political revolution. The reason for this lies in the fact that a philosophy, unlike a polity, is an individual matter. A man may reconstruct his *Weltanschauung* — establish his world of thought upon a new foundation, and rearrange his order of values — without encountering any greater resistance than the inertia of his own habits. And such a revolution is the more easily accomplished in an individualistic era like the present, in which the church has relaxed its hold upon the minds of men. If, then, there be any practical risk in the exposure of belief to the variability of theory, that risk will be peculiarly great in the case of philosophy. And there is also a peculiar liability to confusion here, because theoretical philosophy has never as yet succeeded in developing a technique of its own. The terms of philosophical research and speculation are largely the terms of religious belief; so that the layman too readily identifies the tentative hypotheses of the investigator with the venerable symbols of his faith.

Theory and Belief as Forms of Knowledge, Having the Same Fundamental Value

§ 2. Both theory and belief, the new word of critical speculation, and the old assumptions of life, are forms of knowledge. And although it is necessary that these forms should be distinguished and even separately organized, that necessity should not blind us to the fact that their *value* is fundamentally the same. That the control of nature through the advancement of knowledge is the instrument of progress and the chief ground of hope, is the axiom of modern civilization. This is more peculiarly a modern idea than is commonly supposed. The ancient world had its dogmatic and its critical idea of progress. The former was the idea of national or racial aggrandizement by the conquest of territory and the usurpation of political control. The latter, contributed by the genius of Greece, was the humanistic idea of the intensive cultivation and refinement of human nature. These ancient ideas were superseded by Christian supernaturalism, which referred man's hope of salvation to another world which might be won by the repudiation of this. As Christian Europe became secularized, there developed the theocratic idea of a fixed system in which all human activities should be limited and controlled by religious authority. Finally, as a reaction against the established order, there appeared the idea of the Renaissance—an enthusiasm for antiquity, and a desire to reverse the course of history.

The modern idea, though it borrows something from all of these ideas, is fundamentally different. It bespeaks a solidarity of mankind in the enterprise of life, and in this manifests its Christianity; and it derives from paganism a respect for human capacities, and a confidence in man's power to win the good for himself. But these motives are so united in the modern spirit as to produce something genuinely new. The good is to be won by the race and for the race; it lies in the future, and can result only from prolonged and collective endeavor; and the power to achieve it lies in the progressive knowledge and control of nature. This is the Baconian idea. The incentive to knowledge lies in its application to life. "For fruits and inventions are, as it were, sponsors and sureties for the truth of philosophies." Therefore, Bacon would have men of learning begin and end their study with the facts of their present environment. "For our road does not lie on a level, but ascends and descends, first ascending to axioms, then descending to works." In the last part of the *New Atlantis* there is a remarkable description of the riches of Solomon's House, the great museum and laboratory, the treasure house and workshop, which was "the lantern of this kingdom." The words with which the father of

Solomon's House receives his visitors are a terse and eloquent summary of that which Francis Bacon prophesied, and which posterity has steadily achieved. "The end of our foundation is the knowledge of causes, and secret motions of things; and the enlarging of the bounds of human empire, to the effecting of all things possible."[1]

The value of theory and belief is in the end the same. Both are forms of knowledge, and knowledge furnishes the illumination and guidance of all conscious action. But, as we shall now see, each of these forms of knowledge has also a *specific* value, through which this more fundamental value is realized; and these more specific values require not only a difference of procedure, but even a certain incommensurability of terms.

The Difference and Antagonism of Motive in Theory and Belief

§ 3. In an essay entitled "The Scepticism of Believers," Leslie Stephen remarks a common confusion between *un*belief and *contrary* belief. The term 'belief' is at any historical moment almost invariably used to denote the established belief, that is, the belief supported by authority or by the consensus of opinion; while the term 'unbelief' is used to denote dissent from the established belief, even when, as is most often the case, this dissent is itself due to belief. The established belief resists change, and must be attacked, weakened, or destroyed, before it is possible for another belief to get a hearing; hence assenters come to regard dissenters as destructive in their primary intent, and are blinded to the fact that there is *another belief at stake*, which may be as affirmative and constructive in its own terms as that which at the time prevails. Thus modern religious orthodoxy has condemned as unbelief a certain secular tendency which really has arisen, not from a love of mischief-making, but from a most devoted confidence in the uniformity of nature, and in the power of man to save himself. It is not wholly unjust to assert, as Leslie Stephen does assert, that, in opposing the free advance of science and of individualism, defenders of "the Faith" have virtually sought to prevent or destroy that faith in the enterprise of civilization which has mainly inspired the progress of the last two centuries.

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[1] Bacon: *Philosophical Works*, Edited by Ellis and Spedding, Vol. III, p. 156; cf. *ibid*, Vol. IV, pp. 73, 96. This reference to Bacon is in part reprinted from an article entitled: "The Prophecy of Francis Bacon," *Popular Science Monthly*, Vol. LXXVII, May, 1910.

But for our present purposes the significance of this lies not in the issue between warring beliefs, both of which are positive and confident, but in the issue between belief, which puts heart into men, and that state of suspended animation, of hesitation, and general impotence, which is properly to be regarded as unbelief. "The man has most faith, in the sense in which faith represents a real force," says our author, "whose convictions are such as are most favorable to energetic action, and is freest from the doubts which paralyze the will in the great moments of life. He must have a clear vision of an end to be achieved, devotion to which may be the ruling passion of his life and the focus to which all his energies may converge."[1] In the present discussion, I use the phrase 'established belief' to denote faith, in this sense of *conviction favorable to action;* and it is my purpose to show that the opposite state of mind, unbelief, or the lack of convictions favorable to action, may be induced by *theory*. Before theory can become belief it must be assimilated to a plan of life; it must be not only asserted, but also adopted. And when belief becomes theory, it means that an integral component of some man's plan of life is withdrawn; making it necessary that his hand should be stayed, and the plan suspended, if not permanently abandoned. Without a recognition of this radical difference between theory and belief, unless it be understood that as moods, states of mind, or moments of life, they are almost antithetical, one must remain blind to the real tragedy of heresy and doubt.

The virtue of belief lies in the application. Knowledge does not become belief until it is presupposed for the purposes of action. This holds equally of the most elementary common sense, of technical skill, and of religious piety. Common sense consists of the manifold things that can be *taken for granted* for the purposes of everyday life. Common sense must be true to be useful; but it would still not be useful unless it were habitually and implicitly trusted. Technical skill is derived from science; but until scientific principles are sufficiently well established to be relied on, they cannot be applied. And piety, if it be not constant, if a life be not founded on it, is not that good thing which is called religion. He who makes plans for the morrow, or constructs a bridge, or prays to God, *believes.* There is, then, *a specific value in belief,* over and above the value of truth which it must have in common with knowledge. This value is that confidence and steadiness, without which no consecutive endeavor is possible. And since this is the case, it follows that there is a legitimate and powerful incentive to belief, which may be distinguished from the love of truth. So that they are not wholly unreasonable who resent being robbed of their belief; or, seeking to have it restored, pray God to help their unbelief.

---

[1] Leslie Stephen, *An Agnostic's Apology*, p. 50.

Now it is clear that theory can no more take the place of belief than a stone can take the place of bread. Theory does not directly nourish and sustain life, as belief does; because, unlike belief, it does not suit the humor of action. To theorize is to doubt. The investigator must be both incredulous and credulous, believing nothing, and prepared to believe anything. While he remains theoretically minded, he remains open-minded, receptive to evidence, committing himself to assertions only tentatively or provisionally. He may be preparing foundations, but he cannot let them stand, and hence is not free to build on them. Furthermore, for the very reason that the theorist is not expected to put his theories into practice, he enjoys a certain irresponsibility. To him is allotted the task of examining a question on its merits, without reference to ulterior motives. He is permitted a certain play of conjecture, a certain oscillation of mind between hypothetical alternatives, that is fatal to administrative competence. Nor is the theoretical mind held to those standards of proportionateness which obtain in life. The scientist is not infrequently likened to James's "myopic ant," who tumbles into every microscopic crack and fissure, and never suspects that a centre exists. But fatal as such procedure would be to the proper conduct of life, it is neither unworthy nor unfruitful as an incident of theoretical analysis. Chesterton has remarked that "a man does not go mad because he builds a statue a mile high, but he may go mad by thinking it out in square inches."[1] In the latter case, judged by the standards of social efficiency, the man *is* mad; but his madness is explained, or adjudged not madness after all, when it is recognized that his interest is theoretical. And a similar allowance is made for a certain difference of pace in life and in theory. There is a maxim to the effect that "he that will believe only what he can fully comprehend, must have a very long head or a very short creed." In other words, when theoretically-minded, one proceeds as though life permitted of being invariably guided by good and manifest reasons; whereas practically, if one were to adopt such a principle, one would never reach the first milestone. Intelligent living proceeds not by doubting, examining, experimenting, and proving, but by assuming. There is an urgency and brevity about life that makes it impossible that one should give the rein to one's critical powers or weigh every affirmation in the delicate balance of logic.

I hope it is clear that I am not attempting to divide men into believers and theorists. I am distinguishing not between classes of men, but between characteristic moods or states of mind. The difference, however, is not so much psychological as it is moral. There is a different motive in theory and in belief, a different human good. Hence it follows that these moods may confront one another dramatically both in individual life and in the history of society. There is a party of theory and a party of belief, with a loyalty to each. It may be that in our own time, for example, there is more need of emphasizing the motive of belief. We live in a rationalistic age, many of us in a rationalistic fellowship or community, and incline to the party of theory. It is the mark of such partisanship to suppose that advocates of established belief are moved to suspect or resist innovation only by stubbornness or inertia. On the contrary, conservatism is not less passionate than radicalism, nor less moved by the love of good. For the advocate of established belief is the advocate of established life; of that present adjustment of interests which is daily tested and proved, and to which the great majority of men are wholly and irrevocably committed. It is less enlightened to despise him as the enemy of truth than to pay him some respect as the friend of peace and order.

---

[1] G. K. Chesterton, *Orthodoxy*, p. 67.

The Solidarity of Belief

§ 4. We shall not understand the strength of the motive of belief, or the part which it plays in the vital economy, until we recognize its *corporate* character. An established belief possesses a value proportional to the number of interest invested in it. And this solidarity of belief manifests itself on every scale, individual, social, and historical. It has been said that every man of action is a fatalist. This is due to the need of a permanence of belief, if the several acts of an individual life are to contribute to one end. A plan of action, in proportion to its scope, requires time and manifold agencies for its execution, and must be adhered to from moment to moment and from act to act. Every plan of action is based on innumerable assumptions concerning the natural and social environment; and if these assumptions be questioned, the plan is virtually suspended. Action is efficient in proportion to its range, and the greater its range the more necessary is it that its components should be rigid and stable. Assumptions must be trusted implicitly in order that one may be free to leave them behind one's back and face the work to be done.

The larger the enterprise, the greater the need of a fixed orientation, of a view that shall not dissolve until a thousand tributary agencies have been assembled, coördinated, and made jointly and cumulatively to achieve the designated end. It follows that a steadiness of belief is more indispensable to social than to individual action. Every variety of coöperation requires that men shall occupy common ground. The best partners, like the best friends, are those who can take the most for granted. That which is true of every lesser social enterprise is supremely true of politics and religion. The arm of society is the institution, and this owes its power to a wide-spread community of belief. The institution is the most delicate and complicated mechanism of life, constructed out of the purposes and convictions of innumerable individuals. And this mechanism cannot remain intact, and be the instrument that it is designed to be, unless the parts be firm and durable. In short, society could not act, for the maintenance of order or the promotion of civilization, if men's ideas were fluent and transitory. This does not mean merely that social action would be hampered, but that any political or organized community whatsoever would be impossible. Unbelief is equally fatal to the full benefit of religion. That benefit is realized only when a firm conviction concerning the ultimate source of human fortune, or the supreme object of devotion, dominates and unifies all the varied activities of life. This benefit is never fully attained; but so far as it has been attained, it has given to civilization something of the sweetness and vigor of health. When science and art, common sense and mystical ecstasy, the outer manner and the inner propensity, in all men different and yet in all alike, do but embroider and enact one theme, the circle is closed and the strength of man made perfect. And such unanimity of imagination and enthusiasm, quickening and ennobling the concert of action, must rest on unseen but deep-laid foundations of common belief.

There remains one further proof of the solidarity of belief. If society is to act effectively, it must remain in agreement with itself not only breadthwise but also lengthwise. The temporal continuity of civilization is the indispensable condition of progress. When fundamental convictions are altered, it is much like moving to a new planet; the work must be begun all over again. Apparently the conquests of civilization are gained by swift and sudden victories. But revolution is only the beginning of reformation. It is the slow process of reorganization and education that saves the fruits of such victories, and constitutes that steady if almost imperceptible advance on which the hope of civilization must mainly rely. In order that this shall be possible, it is necessary that beliefs should be transmitted together with problems and opportunities. Unless the burden is to fall, the young must not only grasp what the old have let go, but they must obtain the same foothold.

There are, then, *systems of belief* which condition effective, concerted, and progressive living. Such systems, it may be further remarked, have their more and their less vital parts. There are some beliefs which, like the keystone of the arch or the base of the pyramid, cannot be dislodged without overthrowing the whole structure. If there be a good in all belief, that good will be greater in such beliefs; and if there be a motive which rallies men to the support of any belief, men will be moved most passionately when such beliefs are at stake. For these are the beliefs most built upon, to which men are most committed, and in which they have invested all their possessions. When they are shaken, it is like the trembling of the solid earth.

Galileo and the Inquisition

§ 5. Unless, in spite of all prepossessions to the contrary, in spite of a justifiable impatience with every obstacle to progress, we can see a certain rightness and sound loyalty in conservatism, we shall remain blind to the meaning of the great transitional eras. Thus we are swift to condemn the Inquisition of the seventeenth century, and the compromises of Galileo and Descartes.

The catholic orthodoxy of the time has been proved wrong, cruelly and fatuously wrong; and Galileo and Descartes doubtless lost an opportunity of displaying the heroism of Bruno and Spinoza. But a powerful motive of the drama will have been reduced to a nullity, if it be supposed that the Holy Office was prompted only by malice, or Galileo and Descartes by cowardice.

Galileo,[1] it will be remembered, was convicted of holding that the earth moved. This doctrine was declared to be "absurd, heretical, contrary to the text of Scripture"; and Galileo was compelled to repudiate it. He defended himself on the ground that Scripture was not science. "Hence it appears," he said, "that when we have to do with natural effects brought under our eyes by the experience of our senses, or deduced fron absolute demonstrations, these can in no wise be called in question on the strength of Scripture texts that are susceptible of a thousand different interpretations, for the words of Scripture are not so strictly limited in their significance as the phenomena of nature."[2] But this defence left out of consideration what was referred to in the charge as the "absurdity" and "heretical" character of the new theory. It was not its contradiction of Scripture texts that made it dangerous, but its contradiction of the prevailing belief. This was definitely committed to the immobility of the earth; and in concluding that the Copernican theory, advocated by Galileo, was a menace to it, the Holy Office was not mistaken.

But why should the immobility of the earth be a cherished belief, to be protected by the penalty of death? Men are not soberly burned at the stake or submitted to torment by due process of law, out of sheer bloodthirstiness, or on account of trivial offences. It must all appear childish and wanton, unless we can learn to recognize the immense human importance which once attached to what is now regarded only as an obsolete astronomy. For it was not merely that men wondered how, if the sun did not move, Joshua could have commanded it to stand still; the Copernican theory contradicted the entire practical orientation that dominated the imagination and justified the plans of Christendom. Never in the history of European civilization has common sense been so comprehensive and so highly unified as it was in Galileo's day. That synopsis of heaven and earth which was the theme of Dante's *Divine Comedy*, and the fundamental thesis of St. Thomas's *Summa Theologiae*, was not an esoteric truth, but an illumination shared by common men, and revealing to them the objects of their daily hopes and fears. The earth was the centre of a compact and finite created world. It was prepared by the hand of God for man's habitation, and surrounded by sun, moon, and stars for his convenience and delight. God himself dwelt at the periphery of the system, where he could observe and regulate the human drama enacted at the centre. Man's fall and redemption were the very theme of nature, the key to its interpretation; and the earth as the scene of these transactions was its true centre.

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[1] 1564–1641.

[2] Quoted by Mézières, "Trial of Galileo," *Popular Science Monthly*, vol. X, 1877, p. 389.

Now let it be remembered that this image of nature was vividly present to the common mind, portrayed in every form of art, repeatedly implied in the postures of religious observance, and daily represented in common speech and gesture. And let it be remembered, furthermore, that this was an age in which secular and religious beliefs were not sharply divorced; when what men believed in particular was subordinated to what they believed on the whole, and when, in spite of a growing worldliness, men could never wholly forget the saving of their souls. Is it any wonder, then, that men were shocked when they heard it said that the earth moved, that it was only the loose swinging satellite of a sun that was but one of many suns? When the Christian imagination has never in the centuries that have followed been able entirely to adapt itself to a decentralized and infinite cosmos, with its limitless plurality of worlds, is it any wonder that a Christian of the early seventeenth century should have been unable to face such a hypothesis? For a dozen centuries Europeans had been growing accustomed to the world of the Biblical and Ptolemaic imagination; this was for all practical purposes now *their* world, in which they had built their home and laid their plans, and which was endeared to them by every tradition and association. Surely, whatever the Inquisition may have been guilty of, it was not sheer brutality; for it was the instrument with which this age thought to protect itself and every good thing which it owned.

When I bring myself to feel the force of these considerations, I am convinced that the tragedy of Galileo is not so simple as is sometimes supposed. Neither he nor his accusers could have enjoyed an undivided mind. As they were not merely the wicked enemies of truth, so he was not merely a reckless iconoclast forced to keep silence from fear of physical torture. For both must have felt the conflict between loyalty to the existing order and assent to theoretical truth. The difference lay rather in the relative strength of the two motives. The officers of the church were in a position of responsibility; Galileo, in the quiet and isolation of the Belvedere, could free his mind from the thought of social consequences, while dealing with "natural effects brought under our eyes by the experience of our senses."

After his first trial Galileo attempted to avoid the charge of disturbing the common belief, by publishing his astronomical studies in the form of "a Dialogue . . . in which are discussed the two most important world-systems, . . . without any decision being arrived at between them."[1] In these dialogues the merits of both systems are argued, with the result that, while the advocate of the traditional system is the nominal victor, the evidence for the Copernican system is actually more convincing to any one qualified to judge. This was undoubtedly an attempt to satisfy the general public by proclaiming in a loud voice, "The earth does not move," while at the same time whispering to his fellow-augurs, "but *we* know that it really does move." Galileo was by no means incapable of such a stroke, and it was their resentment at what they regarded as a bold trick that inspired Galileo's accusers with the bitterness which they manifested at his second trial. But taken in the light of the real conflict of motives which Galileo must have felt, and in the light of the policy pursued by other men by no means so witty and adroit as he, may we not believe that these dialogues were in part conceived as a serious attempt to reconcile theory and belief? Galileo was not a revolutionist, but he was jealous of his scientific reputation. He wished to be true to the standards of exact research and at the same time avoid disturbing the public peace. And so he proposed to regard his scientific conclusions as "hypothetical," meaning that they were abstracted from belief. He thought that science might be permitted to go its own way, and freely entertain any idea that might recommend itself on purely theoretical grounds, provided that society could be protected from the premature attempt to put such ideas into practice. Society believes, the scientist affirms; they do so for different motives, and with different values at stake. It would be wise, then, to separate the theoretical and believing processes. They cannot, it is true, be absolutely separated, nor would that be desirable even if it were possible; but they can be regarded as different functions of society and prevented from directly interfering with one another.

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[1] Published in 1632. Cf. H. Höffding: *History of Modern Philosophy*, trans. by B. E. Meyer, Vol. I, p. 175.

Descartes's Reconciliation of Theory and Belief

§ 6. If I am mistaken in attributing such reflections as these to Galileo, there can at least be no doubt in the case of Descartes.[1] The news of Galileo's conviction in 1633 reached Descartes just as he was in the act of publishing his *De Mundo*, in which he maintained the doctrine of the motion of the earth. Although, as Descartes himself afterwards affirmed, this doctrine was essential to his whole philosophy of nature, he at once abandoned the project. And when he returned to the topic in his *Principles of Philosophy*, he had found a way to reconcile his theory with the accepted belief. He defined motion as "the transporting of one part of matter or of one body from the vicinity of those bodies that are in immediate contact with it, or which we regard as at rest, to the vicinity of other bodies."[1] Now, according to the Cartesian theory of planetary motion, the planet is embedded in a fluid which sweeps vortex-fashion round the sun. It follows that, while the vortex does move, the planet, in this case the earth, does not move, since it remains fixed in relation to the matter immediately adjacent to it.

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[1] 1596–1650.

Now why should Descartes attach importance to what we do not hesitate to call a quibble? Is it merely a proof of timidity and disingenuousness? Descartes was not, it is true, of the stuff of which martyrs are made; but he was nevertheless a man of more than average courage, and of eminent intellectual honesty. The explanation lies elsewhere. He did not pander to his age for purposes of private advantage; but he did sympathize with his age, and he did desire practically to identify himself with it. The motion of the earth meant to his age much what the abandonment of the institution of marriage or of the principles of democracy would mean to ours; it was a symbol of failure and of return to chaos. That Descartes was profoundly concerned at the conflict between theory and belief, between that intellectual freedom which was the condition of truth and that uniformity of sentiment which was the condition of social stability, is proved beyond doubt by the most personal of his writings, the famous *Discourse on Method*. There he concludes that just as when we propose to rebuild the house in which we live, we must nevertheless occupy some quarters while the work is going on, so it is necessary to believe practically, even when the theoretical judgment is suspended. Descartes proposes, therefore, to regulate his practice conformably to the opinions of those with whom he has to live. And since neither society nor the individual can make progress if they are forever examining the ground at their feet, he proposes for practical purposes to adhere steadfastly even to doubtful opinions, once they are adopted; "imitating in this the example of travellers who, when they have lost their way in a forest, ought not to wander from side to side, far less remain in one place, but proceed constantly towards the same side in as straight a line as possible, . . . for in this way, if they do not exactly reach the point they desire, they will come at least in the end to some place that will probably be preferable to the middle of a forest."[1]

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[1] Descartes: *Principles of Philosophy* (1644), trans. by Veitch, p. 245.

Galileo and Descartes were divided against themselves through feeling the weight of two great human motives, rationalism and conservatism. Bruno, Campanella, Ramus, and Vanini, having identified themselves more uncompromisingly with the first of these motives, antagonized the second and were overwhelmed by it. The history of these six men testifies, not so much to the cruelty and duplicity of human nature, as to the almost unconquerable resistance of an idea which society has built into its foundations.

The Natural Conservatism of Belief. Present Tendencies

§ 7. It may be inferred from the fate of these intellectual pioneers that established belief is capable of taking care of itself. Without doubt there is a heavy inertia in belief, that saves it from being too easily overthrown. Not only are new ideas distrusted by those whose enterprises they threaten to discredit; but they have difficulty even in gaining access to the mind. They must always meet and overcome the charge of "absurdity" that bespeaks the settled habits of common sense. The author of the *Religio Medici* shows a charming indifference to the absurdities of his day. They are so remote from common sense that they may be tolerated without fear of any consequences for life. "Some," he says, "have held that Snow is black, that the earth moves, that the Soul is air, fire, water; but all this is Philosophy, and there is no delirium."[1] A recent writer tells us that "all men who have lived to a certain age have learnt that there are certain facts, certain experiences not at all connected with the supernatural, which they dare not tell of for fear of being put down as inventors. . . . Just as the old woman was ready to accept her travelled son's yarns of rivers of milk and islands of cheese; but when he deviated into the truth she stopped. 'Na, na!' she said, 'that the anchor fetched up one of Pharaoh's chariot wheels out of the Red Sea, I can believe; but that fish fly! Na, na! dinna come any o' your lies over yer mither.'"[2]

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[1] Descartes: *Discourse on Method* (1637), trans. by Veitch, p. 25.

But it is worthy of remark that common sense is not to be conjured with as it once was. We have grown first accustomed to absurdities, and then fond of them. I am not sure that in our day the burden of proof does not lie with the familiar fact. We expect to be surprised, and are suspicious of a theory that lacks novelty. This has doubtless always been the case with intellectual radicals, but it is fast becoming a general state of mind. Many reasons may be offered for the change. First of all, it is due to the high conductivity of modern society. The mood of one individual is transmitted with incredible rapidity to the entire community. The doubts, conjectures, and conclusions of theorists are promptly communicated to the public, which straightway itself strikes a theoretical attitude. Again, the general triumph of democratic principles has made a difference here. Intellectual exclusiveness does not suit the temper of liberal societies. It must be share and share alike with knowledge as with other commodities. The best is none too good for every man; hence there can be no living on the paternalistic bounty of a class of wise men. It was once thought that if the eyes of a few were opened they might lead the rest; but now none consent to remain blind. And, finally, the humanitarian and utilitarian sentiment requires that all knowledge shall promptly be put to use. In order that men may be saved by it, or the conditions of life bettered, or mankind be brought a step forward, knowledge must be instantly worked into life and made to serve.

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[1] Sir Thomas Browne: *Religio Medici* (1646), Temple Edition, p. 115.

[2] H. Fielding: *Hearts of Men*, pp. 274–275.

All these and other tendencies of the day conspire to produce an impatience and over-haste in belief. We suffer from a new kind of credulity. It was once complained that men are too easily inclined to believe what their fathers believed, that men lack originality and independence. But there is now reason to fear that men may too easily believe what no one has ever believed before. Men with settled convictions may become as rare as were free-thinkers in an earlier time. And the consequences must be scarcely less detrimental to social welfare than the consequences of the earlier complacency and narrow-mindedness. For inquisitiveness and fluidity of mind, though they condition the discovery of new truth, are intolerable in society at large. Theory must correct and enlighten belief, but it cannot, consistently with the conduct of any considerable enterprise, replace belief.

The Need of Mediation between Theory and Belief

§ 8. I cannot hope to offer any general solution of what appears to be a recurrent and inevitable problem. It is of the very essence of life that it should be both conserved and changed. To belief, society owes its cohesiveness and stability; to theory, it owes its chance of betterment. And since every human motive is liable to exaggeration, society will always suffer harm on the one hand from complacency and tyranny, and on the other hand from reckless innovation. Conflict between the mood of theory and the mood of belief, or between the party of theory and the party of belief, will doubtless remain to the end a source of confusion and waste. And this conflict will be most bitter where the most is at stake; respecting those ideas, namely, in which society is most deeply involved. But I think that we are justified in drawing certain inferences that are not wholly insignificant.

In the first place, since there is a virtue in belief that has no equivalent in theory, it is wise to surrender belief reluctantly. A due recognition of the gravity of such a crisis permits no other course. Some degree of stolidity and inertia is a mark of moral poise. Nor is this incompatible with intellectual alertness and curiosity. It requires only that one shall acquire reserve, and refuse to admit strange theories at once to the circle of one's dear convictions. Similarly, conservatism in social action is not incompatible with the liveliest and most serious speculation concerning human institutions; but if this is to be possible, society must act more slowly than the curious-minded speculate, and insist that ideas be long tested, and gradually absorbed.

There is also a certain obligation in this matter that rests with theorists, and more especially with those who are devoted to the examination of the most fundamental ideas. It happens, doubtless because these ideas have not as yet permitted of exact treatment, that there is here the least barrier between theory and belief. Political, social, and philosophical theory speak the language of common sense, using terms that suggest the objects of daily life. It is as though the anthropologist were to allude to his personal friends. But there can never be any exact correspondence between the terms of theory and the terms of belief, because they are defined by different contexts, and belong to different systems. All the more reason, then, why different symbols should be employed, and the layman be spared the needless fear that his bread or soul's salvation hangs on the fortunes of an argument.

What I have said applies with peculiar force to the philosopher. No one else debates such grave issues; nor is there any other region of theoretical inquiry in which differences and fluctuations of opinion are so marked. And I refer here, not especially to those who proclaim themselves metaphysicians, but to all theoretically-minded persons, including scientists and moralists, who busy themselves with ultimate questions. It would seem to follow that society is in special need of avoiding a hasty assimilation of such theory. And yet the words which it ordinarily employs are words which symbolize to mankind their most trusted and cherished objects of belief. No one has taken the name of the Lord his God in vain so frequently and so unconcernedly as the philosopher. While philosophers dispute, believers witness with dismay the apparent dissolution, not only of God, but of immortality, freedom, marriage, and democracy as well. I wish that philosophy, for theoretical purposes, might speak a language of its own, and settle its disputes in a vernacular that does not arrest the attention of the community. If this were possible, philosophy would be better entitled to the full benefit of that immunity from direct social responsibility which is most conducive to clear seeing and straight thinking. And society could afford to wait for the application of a more refined and better-tested truth.

No theorist is under obligation immediately to give society the benefit of his theorizing. It was said of Samuel Clarke, who sought to overthrow atheism by scientific argument, that no one had really doubted the existence of God until he undertook to prove it. There will always be an absolute difference between rational assent on theoretical grounds, and implicit belief. The theoretical mood, even when a conclusion is reached, is a state of practical doubt. When the transition is made from believing to theorizing, the loss is certain; and he who lightly encourages such a transition is guilty of recklessness and irresponsibility. It is a grave matter to substitute one's own theory, however well-reasoned, for another man's belief. For the belief is a part of the believer's life, a condition of the confidence and hopefulness of his action. It is a mistaken idea that honesty compels every theorist to be a propagandist; it is true, rather, that in the great majority of instances, the sentiment of humanity, and a serious regard for the well-being of society, require that he shall not.

The task of mediating between theory and life is perhaps the most delicate and responsible task which it falls to the lot of any man to perform. And it cannot be denied that the theoretical habit of mind tends to disqualify one for undertaking it. For the investigator is trained to neglect every consideration but such present evidence as he can obtain. The human probability that his conclusions will some day, perhaps tomorrow, be over-ruled by new evidence, he properly excludes from his consideration. It is not relevant to his problem. But while theories may be changed with little cost and with certain gain, this is not true of beliefs. Here the cost is more certain than the gain. And the very consideration which the theorist is trained to neglect, and must neglect if his mind is to be free, is here of paramount importance. He who is to advise men must be the friend of men. He must understand their hopes and share their responsibilities. Hence he must regard every idea with reference to its effect on that present, concrete, human state of mind, from which all social action must proceed. No one has proclaimed more eloquently than Francis Bacon that it is to knowledge that man owes his triumph over nature and his advancement in all noble arts. But he would willingly, I think, have said of established belief, what he said of antiquity, that it "deserveth that reverence, that *men should make a stand thereupon* and discover what is the best way; but when the discovery is well taken, then to make progression."

CHAPTER II

SCIENTIFIC AND RELIGIOUS MOTIVES IN PHILOSOPHY

The Difference between Science and Religion, and the Ambiguous Position of Philosophy

§ 1. THE distinction between theory and belief is of the utmost importance, not only for the understanding of the relation of philosophy to life, but also for the understanding of the development and present meaning of philosophical doctrines themselves. For philosophy, owing to its peculiar relations with science and religion, has been governed by both motives.

There are two fundamental differences between science and religion, a difference of subject-matter, and a difference of motive.[1] Their difference of subject-matter corresponds to the difference between proximate and ultimate causes. Physical science has to do with particular interrelations and rearrangements among facts of nature; religion has to do with the general character of nature as a whole, or with whatever may lie beyond nature and still belong to the environment of life. Their difference of form corresponds to that difference between theory and belief which we have just discussed. Science is the most conspicuous example of the method and spirit of disinterested research. Its development has been marked by the purification of its theoretical motive; until, despite its ulterior usefulness, it is in its own procedure of all human activities the most indifferent to the clamor of interests. Religion, on the other hand, is essentially a plan of action.

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[1] The subject-matter of science will be discussed in the next chapter. We have here to do primarily with its theoretical motive.

Religion is man's hope or despair of salvation. Thus while science expresses itself in neutral or indifferent terms, the interests at stake being eliminated and the application being held in reserve, in religion the application is already made. Science is a description of its subject-matter; religion is something done, something feared, or something hoped, *in view* of its subject-matter.

Philosophy has from the beginning served these two masters. It has attempted in the spirit of science, and with a like theoretical detachment, to carry knowledge beyond the limits of science. But it has also attempted to formulate religious belief, giving articulate expression to the religious emotions and elaborating a plan of salvation. Philosophy is thus resorted to by two classes of persons. By some it is expected to afford a rigorous theoretical solution of special problems that lie outside the range of the positive sciences, problems such as 'consciousness,' 'space,' 'causality,' 'truth,' and 'goodness.' By others it is expected to furnish the age, or any hungering soul, with a summary and estimate of the world for the purposes of life. To supply the former demand, philosophy must be technical and free from ulterior motives; while to supply the latter, it must be humane and keenly alive to all the deeper needs and passions. Philosophy is thus at once a recondite investigation, and a popular oracle; dispensing logical subtleties to the learned and homely wisdom to the vulgar. And in consequence of this double office, philosophers divide among themselves, and speak a mixed language.

The Theoretical Motive in Science

§ 2. Science, as we have seen, is by no means exclusively theoretical in motive. Indeed applied or popular science undoubtedly precedes theoretical science. The liberation of the intelligence from immediate attendance upon action, and its independent exercise in its own interest, is a reward of past service, as well as an opportunity of higher service. The intelligence has had to earn its place in the economy of life. As a primitive necessity, intelligence is *the capacity to do the right thing under given circumstances.* The "right" act is always relative not only to circumstances, that is, to the occasion or environment, but also to some actuating interest. Its rightness consists in its so meeting or modifying circumstance as to satisfy interest. Circumstance will accordingly evoke one or the other of two types of right or intelligent response. It will be resisted or evaded, disliked or feared, on the one hand; on the other hand, welcomed, used, or desired. In this immediate relation to life, then, both causes and effects are regarded under the aspect of their maleficence or beneficence. And from this view of nature it is but a short step to animism, or the view that natural causes are governed by *animus.* Certain typical processes of the environment with which one is compelled to treat, are regarded as governed by a consistent friendliness or hostility. The environment is socialized; and the method of conciliation or retaliation is extended beyond the circle of human and animal associates to the wider realm of natural causes. In other words, beneficent causes are construed as bene*volent*, and maleficent as male*volent.* Wherever effects are regarded as good or bad, and their causes as working good or working evil, this is probably always the hypothesis which is nearest at hand and most plausible. It appears, long after the development of mechanical science, in the instinctive resentment or gratitude with which one greets a turn of fortune. There thus arises a primitive science in which effects are benefits or injuries, and causes friends or enemies; in which, in short, natural events are wholly assimilated to life.

Out of this primitive science, mechanical or theoretical science has gradually developed, chiefly through the operation of two motives. In the first place, the method of conciliation and retaliation was experimentally discredited as a mode of controlling nature. For the immediate exigency, at any rate, it proved more efficacious to cultivate the soil and observe the turn of the seasons than to sacrifice to Demeter, to keep one's powder dry than to put one's trust in God. In the second place, as soon as men could breathe more easily and indulge themselves more freely in the play of their natural powers, they grew in idle curiosity. They came, in other words, to *observe*, regardless of their hopes and fears. Astronomy was probably the first science in the modern sense, because the stars, at once conspicuous and relatively removed from the theatre of action, have always tended to excite an apathetic curiosity. Through the operation of these two motives, effects were divested of their practical coloring, and causes of their friendly or hostile intent. This did not mean that either effects or causes lost their bearing on life, but only that that bearing was for the purpose of knowledge eliminated as accidental. Thus a physical substance has certain distinguishing properties by virtue of which it is either food or poison; and celestial bodies compose certain configurations by virtue of which man feels the light of day or the darkness of night, the warmth of summer or the blight of winter. But it is the mark of developed science that these properties and configurations are recorded without reference to the sequel, and in terms purged of the comment of passion.

The development of a purely theoretical science has, as is well known, immeasurably increased the contribution of science to life. In this case, at least, the independence of the theoretical activity is the principal condition of its usefulness. The reason for this is not obscure. In so far as knowledge is restricted to the service of existing needs, it confirms the belief in the finality of these needs; but when emancipated from such service, it becomes a source of new needs — stimulating initiative, and opening a prospect of unlimited growth. The application of knowledge is the more varied and fruitful because reserved for the unforeseen occasion. It thus becomes the function of science to accumulate that unappropriated surplus of intelligence from which life derives its resourcefulness and strategy, and by which it is enabled to carry on the constructive enterprise of civilization.

Religion and the Motive of Belief

§ 3. Religion, like science, is grounded in the need of doing the right thing under the given circumstance: like science, it is a matter of adaptation. It arises from the need of doing the right thing *on the whole*, in view of *the totality of circumstance* — from the need of arriving at a *final* adaptation. Religion is the attempt to deal with headquarters, to obtain a hearing at the highest court, some guarantee of the favor of the over-ruling authority. As theoretical science advances and the phenomena of nature are referred to proximate causes, the ultimate causes retreat steadily into the background, and, gathered into one, become God as opposed to nature. The duality of God and nature may from thenceforth be characterized by any degree of separateness. Where God is conceived transcendently, or independently of his works, it is assumed that a man may save himself by treating with God directly, giving no heed to the course of events in the temporal world. Where, on the other hand, God is conceived in terms of the order of nature and history, as their immanent or over-arching unity, his favor may be gained only by complete adjustment to the ways of this world.

Thus religion, like science at its dawn, views the environment under the aspect of its bearing on life. The over-ruling powers are known and judged by the good or evil which they work. But whereas this is the primitive form of science, in which the scientific motive is not as yet specialized and refined, *it is the final form of religion.* God is the name for the over-ruling powers *as sources of fortune.* In so far, and only in so far, as these powers are regarded with love or dismay, with hope or fear, do they constitute the object of religion. Religion is as essentially a matter of life and passion, as is science in its developed form a matter of theoretical detachment. So that science and religion have come to be identified, not only with their respective objects, but with their respective forms of expression. Science, the interest in the proximate causes of things, becomes the unique example of theory: and religion, the interest in the ultimate causes of things, the unique example of belief.

The Confusion of the Philosophical Motive. The Place of a Purely Theoretical Philosophy

§ 4. It is clear, however, that this correlation is arbitrary. Theoretical science is eventually assimilated to life, and finds expression in popular and applied science. In other words, there is a *belief* concerning *proximate* causes. And similarly there is a place for the *dispassionate theoretical* study of *ultimate* causes. In other words, as popular or applied science is related to pure science, so religion is related to pure philosophy.

If this correlation indicates the proper place of philosophy, then it must be recognized that the traditional philosophy has reached no such clear separation of its theoretical motive as has been reached, on *its* part, by science. And it may be objected that the cases are not parallel. There is a reason why the practical motive should outweigh the theoretical in the examination of ultimate causes. For it is undoubtedly the pressure of practical necessity — the brevity of life, and the momentousness of the issues involved — which in this case forces a conclusion when the evidence must necessarily be incomplete. Whereas in the field of science theory may advance far beyond belief, accumulating an ever increasing surplus of knowledge over practice, here the reverse is the case. For the saving of his soul, a man must convert theoretical probabilities into subjective certainties: he must believe more than he knows.[1] In the conduct of his worldly affairs he may live within his means, but in his religion he must run into debt. Thus a strictly theoretical conclusion respecting ultimate causes will always be more limited and tentative than the corresponding belief. And belief, with its greater positiveness, with its daring and its air of finality, will tend to obscure the cautious hypothesis of theory, and to fix itself in the minds of men as the only expression of the interest in ultimate causes. That for this reason the work of the human intelligence *tends* to be divided between scientific theory concerning proximate causes and the religious belief concerning ultimate causes, cannot be disputed.

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[1] Cf. below, pp. 265–267, 345–347, 369–370.

But it is evident that if life is served by a theoretical detachment in the one case, the same will be true in the other case. A rigorously theoretical philosophy, in which ultimate causes are examined by the method of critical analysis, in which the passions are repressed and the application held in reserve, affords the greatest promise of an enlightened, and therefore effective, religion. For the virtue of belief, whatever be its object, whether it be the particular inter-relations of the parts of nature, or the ground and constitution of nature as a whole, is its *truth*. And the speediest and most reliable access to truth lies in the specialization and rigorous exercise of the theoretical method. No faith will be sound at the core which does not contain within itself whatever theory is available. Doubtless faith must overlap theory, as it must be more stable and conservative; but the method of faith cannot supersede or confuse the method of theory, without corrupting its most faithful servant. Strictly speaking, it is as important for religion to promote the development of a rigorously theoretical philosophy, as it is for engineering to promote the development of theoretical physics.

The Subordination of Science to Ethics and Religion in Ancient and Mediæval Thought

§ 5. The present ambiguous position of philosophy is due to the modern opposition of science and religion, and to this habit of linking pure theory with science, and ultimate questions with religion. Those philosophers who are governed by the theoretical motive, and to whom philosophy is first of all a disinterested attempt at exact knowledge, tend to identify it with science; those on the other hand, with whom the subject-matter of philosophy is of paramount importance, whose chief object of interest is the ultimate cause or world-ground, tend to identify it with religion.

But the disjunction between science and religion is a comparatively recent development. In ancient and mediæval times it was largely prevented by the general acceptance of the method of *teleology*. The dominant categories of Greek thought were forged in the Socratic age, and expressed its characteristic humanism and moralism. The Platonic theory of knowledge, adopted by Aristotle, continued by the Neo-Platonists, and bequeathed to Christian scholasticism, was centred in the conception of the good. To understand a thing was to *see the good of it.*[1] In so far as this theory of knowledge prevailed there was no inevitable opposition between religion and science, other than the general opposition between tradition and enlightenment. The method of religion — the interpretation of nature for life, was also the method of science. In the application, in the use or value of objects, was found also their theoretical explanation. The basal science, the model of scientific procedure, was not a physics which abstracted from life, but an ethics which rationalized life. And where science and religion employed the same method, philosophy was not compelled to take sides. It could be at once an extension of science, and the refinement of religion. Philosophy was simply the sustained and systematic pursuit of wisdom: the finishing of knowledge, as distinguished from the fragmentariness of science; and the grounding of belief, as distinguished from the careless superficiality and complacent dogmatism of religion.

The Platonic theory of knowledge was both retained and reinforced by Christianity. In Platonism, teleology had been derived from ethics and extended to religion; in Christianity, it was originally derived from religion. But there was in both the same priority of the fundamental principle of life. Mediæval thought, like ancient thought, was *biocentric* or *anthropocentric*. Nature was accounted for and explained in terms of its bearing on man. It was grounded in the dispensation and providence of God with reference to the well-being of his creatures. The perfection of the ultimate cause, the beneficence of the creative design, was held to afford the most truthful account of the course of nature. In short, theology displaced ethics in the system of knowledge. And with theology as the basal science, it is evident that there was as yet no ground for a radical difference between science and religion. Nor was there any radical difference between either and philosophy. That which theology understood by the light of revelation, philosophy explored by the natural light of reason; while between philosophy, and science in the narrower sense, there was no difference save that between complete and partial knowledge.

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[1] See below, pp. 115, 167.

The Extension of Science to Religion in the Seventeenth and Eighteenth Centuries

§ 6. So long as science was thus dominated by the categories of religion, philosophy suffered no embarrassing necessity of taking sides. When this domination came to an end with the decline of scholasticism, an attempt was made to keep the peace upon a new basis. Whereas the categories of religion had formerly been imposed upon science, the categories of science, independently derived, were now to be extended to religion. In the seventeenth and eighteenth centuries philosophy derived its impetus from the new scientific movement, and consisted primarily in the attempt so to generalize the method of science as to enable it to afford a proof of the great tenets of traditional belief. This common motive appears in the otherwise widely contrasted tendencies of these two centuries.

The Cartesian movement, which dominated the seventeenth century, was inspired by the rise of mathematical physics. In mathematics Descartes found a clearness and cogency in which the traditional philosophy was notably lacking. It revealed to him something of the possibilities of knowledge, if the natural intelligence could but be freed from ulterior motives and from the heavy burden of accumulated tradition. He was astonished "that foundations, so strong and solid, should have had no loftier superstructure reared on them."[1] Such a superstructure Descartes and his followers essayed to rear, adopting the "analytical method" from mathematics, and applying it to a metaphysic of God and the soul. This attempt culminated in the system of Spinoza,[2] with its mathematical terminology, its deductive order, its rigorous suppression of anthropomorphism, and its conversion of God into the ultimate and indifferent Necessity.

The Baconian movement, which began coincidently with the Cartesian movement, but did not assume the ascendancy until the following century, was inspired by the rise of empirical and experimental science. Bacon expressed the spirit of discovery — the significance of Galileo's telescope rather than of his analytical laws of motion. Hence the movement which emanated from Bacon employed the method of observation rather than the method of mathematical deduction. Locke,[3] to whom the movement owed its ascendancy in the eighteenth century, was associated with the experimental physicists of his day, and was suspicious of a priori necessities. He proposed to pursue "the plain historical method." But neither Locke, nor the Deists who followed him, had any doubt of the possibility of establishing the truths of religion by the method of science. Christianity was not only "not mysterious," but was proved beyond reasonable doubt by empirical evidence. God was a simple inference from effect to cause; from the existence of nature to the existence of its creator, and from the contrivances of nature to the intelligence of its creator.

During these two centuries, then, there was no impassable gulf between science and religion, and no dilemma for philosophy. The philosopher was simply one who applied the method of science to the subject-matter of religion. Science was opposed to religion only in so far as it was narrow; and religion was opposed to science only in so far as it was unreasoning. It was the office of the philosopher to expand the scope of reason, or to justify faith by enlightenment.

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[1] *Discourse on Method*, trans. by Veitch, p. 8.

[2] 1632–1677.

[3] 1632–1704.

The Rupture between Science and Religion, and the Dilemma of Philosophy

§ 7. The transition from the thought of ancient and mediæval times to that of the seventeenth and eighteenth centuries, had been marked by the rejection of anthropomorphism. The centring of the system of knowledge in ethics and religion had been seen to involve an initial dogma, which both destroyed the cogency of knowledge and confined it within narrow bounds. In declaring its independence, the science of the Renaissance had represented the ideal of disinterested knowledge, the acknowledgment of necessities and facts without reference to the bias of life. Physics had become the rallying-point of a new army for the conquest of the unknown. This new campaign had presupposed the possibility of extending the conquest to the great problems of religion. Faith and authority had been renounced only in the sure prospect of getting a more valid title to their objects.

But the close of the eighteenth century was marked by a new crisis, due to the failure of this attempt to extend physics to religion, and precipitated by the charge, made by the most eminent philosophers of the day, that the failure was necessary and hopeless. In England, David Hume[1] argued the ambiguity and inconclusiveness of the inference from nature to God, showing that such natural causes as can be verified by observation fail utterly to satisfy the demands of religion. On the Continent, Immanuel Kant[2] confirmed the criticism of Hume, and added to it the destruction of the venerable and feeble Cartesianism of his day; contending that to deduce God from the idea or definition merely, must fail to establish his existence. In other words, the method of empirical science relying on sensible fact, and the method of exact science relying on mathematical or quasi-mathematical concepts, had alike failed to justify religion. There resulted a new division of thought, the division broadly characteristic of the nineteenth century, between the party of science and the party of religion. And at the same time philosophy was confronted with the dilemma which has made its present position so ambiguous. Apparently compelled to choose between science and religion, it has itself divided into two parties: those who have followed science for the sake of its theoretical motive, and those who have followed religion on account of its subject-matter.

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[1] 1711–1776.

[2] 1724–1804. The rationalistic religion of Spinoza, with its entire abandonment of teleology, had already been rejected by popular thought, as essentially irreligious. Cf. below pp. 115–117, 168.

The division between the scientific philosophers and the religious philosophers was further accentuated by the passing of a certain type of thinker. The great scientists and the great speculative metaphysicians of the seventeenth and eighteenth centuries were in many instances the same individuals. Such was the case, for example, with Descartes, Hobbes, Leibniz, and even Kant. M. Abel Rey, in *La Philosophie Moderne*, writes: "All the great philosophers were remarkable *savants*, and the great *savant* never disdained to philosophize. So that one may regard as peculiar and characteristic the complete separation which existed for a time in the nineteenth century, not between the investigations (this is legitimate and necessary), but between the investigators."[1] And the reason for this lay, as M. Rey points out, not only in the movement of ideas which has just been described, but also in the circumstance that science had become so vast in bulk as to exceed the capacity of any single individual. The man of all science was replaced by the man of one science, confident of his ground in proportion to the narrowness of his field, and suspicious of all attempts to deal with ultimates or finalities. Unless the philosopher was himself to become a specialist, and confine himself to the categories of one science, he seemed in very self-defense to be compelled to adopt an independent method of his own; a method opposed, not to one science in particular, but to science as a whole. And he found that method in religion, already united with the proper philosophical subject-matter.

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[1] pp. 20–21

The Scientific Philosophy and the Religious Philosophy

§ 8. Professor Émile Boutroux sums up the admirable Introduction to his *Science et Religion dans la Philosophie Contemporaine*, as follows: "Science and Religion had no longer, as with the modern rationalists, a common surety — reason: each of them absolute in its own way, they were distinct at every point, as were, according to the reigning psychology, the two faculties of the soul, intellect and feeling, to which respectively they corresponded. Thanks to this mutual independence, they could find themselves together in one and the same consciousness; they subsisted there, side by side, like two impenetrable material atoms in spacial juxtaposition. They had agreed explicitly or tacitly to abstain from scrutinizing one another's principles. Mutual respect for their established positions, and thereby security and liberty for each — such was the device of the period."[1] Corresponding to this dualistic fashion of thought, there appeared in the course of the last century the scientific philosophy, or positivism, and the religious philosophy, or romanticism.[2] Each of these types of philosophy was connected with one of the great destroyers of the philosophy of the past — positivism with Hume, and romanticism with Kant.

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[1] p. 35. This book has recently been translated into English by J. Nield. Cf. the Introduction, *passim*.

[2] I am using this term to mean a philosophy in which the spiritual ground or centre of things is *postulated*, or accepted by an act of faith. It is the philosophy in which the motive of religious belief is allowed to dominate. Cf. below, pp. 152–154.

Hume's criticism was unmitigated. It placed the objects of religious interest absolutely beyond the range of reason. The book of divinity, since it consists neither of "abstract reasoning concerning quantity or number," nor of "experimental reasoning concerning matter of fact and existence," must be committed to the flames: "for it can contain nothing but sophistry and illusion."[1] Comte, who followed a century later, gave to positivism a more constructive and hopeful turn, extending to mankind the prospect of the limitless growth of science, and the upbuilding of civilization through the progressive conquest of nature and improvement of man. But Comte's condemnation of the former religious metaphysics was, if possible, more severe than that of Hume, for he correlated it with the infancy and childhood of the mind. Finally, with Herbert Spencer, the metaphysics of former times was formally tried, convicted, and banished to the realm of the 'Unknowable.' The scientist, whether mathematician or experimentalist, was left in absolute possession of the sources of enlightenment; he became not only the consulting engineer, but oracle and wiseman as well.

With Kant, on the other hand, the negation of the older rationalism paved the way for a philosophy of faith. Although positive knowledge was restricted to the hierarchy of the physical sciences, the reason was left in possession of the necessary and valid ideal of the 'Unconditioned'; while God, Freedom, and Immortality, the objects of religion, found their ground in the moral will. Although they might no longer be judged true, according to the canons of theory, they must be *believed* for the deeper and more authoritative purposes of life. This provision of the Kantian critique is the prototype of romanticism, the philosophy dictated by religion. Romanticism did not seek, like the philosophy of the previous centuries, to justify the articles of faith by the procedure of science, but to justify the *attitude* of faith, and clothe it with authority in its own right. Romanticism involved, therefore, no conversion of the passionate terms of religion into the dispassionate terms of theory; it reaffirmed the claims of religion in the spirit and language of religion, transforming them only in so far as was necessary to give them unity and conscious expression.

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[1] Hume: *Enquiry concerning the Human Understanding* (1749), Selby-Bigge's edition, p. 165.

Naturalism and Idealism. The Rise of Pragmatism and Neo-Realism

§ 9. In positivism and romanticism the two motives of philosophy became sharply separated and opposed. Positivism is philosophy driven into the camp of science by loyalty to the standards of exact research; romanticism is philosophy merged into religion through its interest in the same ultimate questions. These two tendencies determined the course of philosophy in the nineteenth century; and they are represented today by naturalism and idealism respectively. In 'naturalism,' the positivistic tendency develops in the direction of a systematic materialism, or in the direction of a more refined criticism of scientific concepts. In 'idealism,' the romantic tendency amplifies and reinforces the theory of knowledge upon which it must rest its case — the theory of the priority of the forms and ideals of the cognitive consciousness. But the difference between naturalism and idealism, like that between science and religion, with which they are respectively correlated, lies not so much in the disagreement of theory as in an opposition of attitude and method. The exponent of naturalism is governed by that reserve and apathy which belong to the scientist's code of honor; the idealist carries into his philosophy all the importunity and high aspiration of life. For him "the teleological standpoint, that of inner meaning or significance," is "the standpoint of philosophy itself." [1]

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[1] E. Albee; "The Present Meaning of Idealism," *Philosophical Review*, Vol. XVIII, 1909.

To naturalism and idealism have latterly been added 'pragmatism' and the new 'realism.' Whether these more recent tendencies represent the philosophy "*qui commence*," and naturalism and idealism the philosophy "*qui finit*," will be certainly known only by those of a later generation. At present they enjoy no such prestige as is enjoyed by their rivals. Naturalism derives credit from the triumphs of science, idealism from the loyalties and hopes of religion. Both pragmatism and realism, furthermore, have begun as revolts, and the very vigor of their protest testifies to the strength of the resistance which they must overcome. But there can be no doubt of their virility, and of their capacity for growth.

Pragmatism and realism are agreed in opposing both the narrowness of naturalism and the extravagance of idealism. Both seek to unite the empirical temper of the former with the latter's recognition of problems that lie outside the field of the positive sciences. They accept neither the finality of physical fact nor the validity of the ideal of the absolute. Their differences are scarcely less striking than their agreement, and may in the end drive them far apart. Pragmatism is primarily concerned to dispute the monistic and transcendental elements of idealism, and to construe life and thought in terms of that *human* life and thought that may be brought directly under observation, and studied without resort to dialectic. But life and thought remain the central topic of inquiry, and tend without sufficient warrant to usurp the centre of being. In short, pragmatism is never far removed from that dogmatic anthropomorphism, that instinctive or arbitrary adoption of the standpoint of practical belief, that is so central a motive in idealism. Realism, on the other hand, reacts not only against absolutism, but against anthropomorphism as well. Realism departs more radically from idealism than does pragmatism. Were the dilemma a real one, pragmatism would find more in common with idealism, and realism with naturalism.[1] For realism, like naturalism, detaches itself from life, and attempts to see things in their native colors through a transparent medium. But the dilemma is unnecessary. It proves possible to be both empirical and rigorous after the manner of science, and also emancipated from exclusive regard for physical fact.

And it is this possibility that defines the opportunity of realism. There are exact methods other than those of manual experimentation; there are other entities than bodies; and other types of relation and determination than those of physics. There is room, as we have seen, for a philosophy that shall search beyond the limits of science for the solution of those problems which underlie religious faith. Philosophy is rightly held responsible for the solution of these problems; if not in the form of verified certainty, then at least in the form of the most reasonable probability. But as in the case of science, so here also, that theory will best serve life which abstracts from life. The profit of religion, like the success of any worldly enterprise, is conditioned by the truth of the presuppositions, the correctness of the adaptation, on which it proceeds. What nature will not tolerate, nature cannot be made to tolerate through any sheer assumption of superiority. Hence to cherish illusions is to buy a subjective satisfaction at the cost of real failure. To know the worst, if such it be, is as important as to know the best; and incomparably more important than to dream the best. Religion is no exception to the rule that man conquers his environment, and moulds it into good, through forgetting his fears and renouncing his hopes, until he shall have disciplined himself to see coolly and steadily. For what he then sees becomes thereafter the means through which his fears are banished and his hopes fulfilled. It is necessary that human passions should be expressed, but their expression is not the function of philosophy. It is necessary to instruct human passions, to illuminate and guide them by knowledge. But even this is not the *first* function of philosophy. For the philosopher's is the prior task of seeking that knowledge itself from which the passions may derive their light and guidance.

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[1] Thus Bergson the pragmatist has much in common with a voluntaristic idealism; and the realist, B. Russell, approaches naturalism. Cf. below, pp. 345-347.

PART II

NATURALISM

CHAPTER III

THE SCOPE AND METHOD OF SCIENCE

§ 1. By naturalism is meant the philosophical generalization of science — the application of the theories of science to the problems of philosophy. Both philosophy and science have, as we have seen, a permanent and institutional character. Each has its own traditions, its own classic authorities, and its own devotees. But naturalism proposes to make the institution of science serve also as the institution of philosophy. This attempted unification of knowledge is perennial. Each epoch of European thought has had its characteristic variety of naturalism; in which its favorite scientific theories have been used to satisfy its peculiar philosophical needs. Thus the atomic theory of the ancients, the mechanical theory of the seventeenth and eighteenth centuries, and the 'energetics' of more recent times, have each in turn been presented in the form of a *Weltanschauung* or general view of life.

Naturalism and Natural Science

The scientist proper, the man of special research, becomes a naturalistic philosopher only when he acts in a new capacity. As scientist, in the strict sense, he is non-committal with reference to philosophical problems. He adopts and employs a technique which is authorized by the consensus of experts within his own field. His problems are the unsolved problems of his forerunners and fellow-workers; his method, a variation or refinement of methods which have already proved fruitful. He is not troubled by the supposed paradoxes of space and time, or by such problems as the nature of causality, the unity of the world, and the meaning of truth. He moves, in short, within intellectual limits which he does not question, and of which he may be even unconscious. But a scientist is also a man, and hence may readily become a philosopher as well. In hours of unprofessional meditation, his mind may turn to those more ultimate problems which are perpetually pressing for solution. And he may then assert that the solution of these problems lies in the application of the discoveries of science. Such an assertion he cannot prove in his laboratory; he can justify it only after the manner of the philosopher. The principal source of naturalism lies in this disposition of scientists, not infrequently men of weight, to assume the rôle of philosophers, and to carry with them into the forum of philosophy the traditions and hypotheses with which they are already familiar.

There is a less evident, though scarcely less important, source of naturalism in the popularization of science. When science is diffused, and transmuted into the form of common sense, it is almost invariably merged with philosophy. As a rule it is not substituted for theories emanating from philosophical sources, but is held along with them. Common sense has no nice regard for the spheres of the several branches of knowledge, and no repugnance whatsoever to contradictions. The mechanical and the spiritual theories of man, or the hypothesis of cosmic evolution and of divine creation, are accepted in the same sense and accorded equal weight; the one being learned from popular science, and the other from the pulpit. There is, furthermore, as we shall presently see, a peculiar readiness on the part of the vulgar mind to fall in with the naturalistic view of things, and to regard it as prior to all other views. For the naturalistic view is, in a certain respect, the same as the 'practical' view, and has a source in organic habit independently of the diffusion of science.

The Prestige of Science

§ 2. Since naturalism is but science in the rôle of philosophy, it has during the last century shared the unusual prestige which science has acquired. Science has come to stir the imagination of men to a degree that is unparalleled. This is due, in part, to the fact that every member of a civilized community uses the results of science, and credits science with them. Science is credited, and justly credited, with the enormous increase of convenience, comfort, and efficiency, which human life has in the last century enjoyed. Transportation, manufacturing, hygiene, every activity employing physical means, has been revolutionized. And this fact is brought home to every man in his daily occupations. The telephone with which he orders his supplies, the trolley-car or automobile which he takes to his place of business, the elevator with which he rises swiftly to the top of a towering structure of steel — these, and a hundred like items, testify perpetually to the glory of science.

Even more impressive to the popular mind than the applications of science, are its discoveries and inventions — its perpetual novelties. Here is an enterprise whose steady advance can be measured. Knowledge is added to knowledge; and every increment opens new prospects of increase. The miracles of yesterday are the commonplaces of today. Science thus commands attention; it stirs the blood; it even makes news!

But there is a deeper reason for the appeal of science to the popular mind. The recent advancement of science has fulfilled the Baconian prophecy, of power through knowledge. Nature has lost its terrors. It has submitted to the yoke of human interests, and been transformed from wilderness into civilization. The brilliancy of scientific achievement has given man a sense of proprietorship in this world; it has transformed the motive of life from bare preservation to conquest. And so frequently has science overcome the accepted limitations of practical achievement, and disclosed possibilities previously unsuspected, that man now greets the future with a new and unbounded hopefulness. Indeed this faith in the power of life to establish and magnify itself through the progressive mastery of its environment, is the most significant religious idea of modern times. And through its relation to this idea science has been justly exalted.

There is a further explanation of the prestige of science, and of naturalism as well, in the distinction and popularity of scientific writers. The philosophical utterances of Spencer, Darwin, Huxley, Tyndall, Du Bois-Reymond, Lord Kelvin, Ostwald, Haeckel, Arrhenius and others, have obtained a publicity only very rarely enjoyed by the recognized leaders of philosophy proper. The same difference obtains between the lesser scientists and the lesser philosophers. And this is not due to the accident of individual genius, style, or manner. For the popular mind, scientific ideas have an immediate intelligibility and a *prima facie* probability, which philosophical ideas have not. If we can explain this fact we shall have advanced far in the direction of a clearer understanding of what science is.

The Agreement between Science and Common Sense

§ 3. There is a distinction made by logicians between the *denotation* and the *connotation* of terms. A term is said to 'denote' certain concrete individuals, and to 'connote' certain properties. Thus the term '*planet*' denotes Neptune, Jupiter, etc., and connotes the property or relation of 'satellite to the sun.' The instances of a term constitute its denotation; the meaning or definition of a term, its connotation. Now it is a significant fact that *the denotation of scientific terms is peculiarly clear or unambiguous to common sense.* The instances of science are readily identified; one knows what the scientist is talking *about.* We can follow his eye to the natural locality which he is observing, or take into our hands the natural body with which he is experimenting. When the philosopher, on the other hand, discourses on the true, the beautiful, and the good, we do not know where to turn. If his face were to assume a rapt expression, and we were sentimentally or mystically inclined, we should feel moved or exalted. For we take such things in good part when seers and poets utter them. Or were his eye to twinkle, we should laugh with him —

and feel relieved. But ordinarily the philosopher looks as secular and literal as any scientist; and in proportion to the hardness of our hearts, we are contemptuous or embarrassed. The scientist alone seems to suit the word to the mood of serious discourse. There is evidently a tacit understanding between him and common sense which, in the case of the philosopher, is wholly lacking. Science speaks in the native tongue of common sense; philosophy in unfamiliar accents that shock and mystify.

The explanation of this lies in the fact that *science and common sense agree in unconsciously accepting a classification or map of experience which it is the business of philosophy consciously to criticise.* This map or classification is sometimes referred to as 'the natural world-order.' In this order, *a thing is a body, and the world is the spacial field and temporal sequence of bodily events.* The instance, case, example, which a word denotes, is always some individual body or group of bodies — occurring somewhere, at some time, and capable of being identified beyond doubt by gesture or manipulation. To think in these terms is the habit of common sense, and the method of science.

The strength of this habit is illustrated by the efforts of the mind to deal with things the corporeal character of which is expressly denied. An almost irresistible propensity inclines the imagination to regard God, spirit though he be, as having a place in the heavens, whither at death the soul may resort. The soul itself, by definition the antithesis of body, is nevertheless commonly imagined as a diaphanous or subtle body-within-a-body, moving with the mortal body before death, and independently of it after death. Similarly, the attempt at clear demonstration almost invariably impels one to the use of spacial diagrams. And the spacial figure is so interwoven in ordinary speech as to be well-nigh ineradicable. A great difference is a 'wide' difference, the better is the 'superior' or 'higher,' the reliable is the 'solid,' and the distinct the 'tangible.'

This habit of thought and speech is not accidental on the part of common sense, nor reprehensible on the part of science. For it is the primary function of the human mind to discriminate and relate bodies. This function is first in order of practical importance. The human mind, like the heart and lungs, is an organ, calculated to assist the adaptation of one body to an environment of other bodies. This function with reference to other bodies is not only the mind's original function, but remains, during a man's natural lifetime, its most indispensable function. "*Our intelligence, as it leaves the hands of nature,*" says Bergson, "*has for its chief object the unorganized solid.* When we pass in review the intellectual functions, we see that the intellect is never quite at its ease, never entirely at home, except when it is working upon inert matter, more particularly among solids . . . where our action finds its fulcrum, and our industry its tools."[1] Intelligence is first of all the attentive discrimination of bodies, and a responsiveness to their proximity, motion, or change of property. And when life becomes less preoccupied with its own preservation and more largely engaged in constructive enterprises, it is on its control of its bodily environment that it mainly relies both for security and for power. Science elaborates and perfects this form of intelligence. Through science it becomes methodical and exact. The use of speech and record makes it an institution supported and utilized by society as a whole; its specialization and expansion beyond the demands of present exigencies renders it a means of resourcefulness and initiative.

Common sense and science (the one unconsciously, the other with an increasing degree of consciousness) thus move within the same limits. They share the same unreflective classification of experience, employ the same axes of reference, have the same notion of an individual thing. This is thought's original sin, its inertia and line of least resistance. It is responsible for the sympathy between common sense and science; and for the somewhat strained relations between both of these and philosophy, whose business it has ever been to remind them that their favorite assumption is uncritical and dogmatic.

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[1] *Creative Evolution*, trans. by A. Mitchell, pp. 153–154, ix.

The Properties of Bodies

§ 4. We must now attempt a more careful account of that common sense *notion of a thing*, which is the subject-matter to which science addresses itself, and which its terms denote. I have as yet but roughly indicated it by the terms 'body' and 'physical event.' It is not to be expected that either common sense or science should analyze this notion. They analyze one body into lesser bodies, visible bodies into invisible bodies; they distinguish and classify bodies; but they do not attempt to enumerate *the generic bodily properties*. This is a philosophical task which we must undertake for ourselves.

In describing the unambiguous denotation of the terms of science, I have alluded to gesture and manipulation as means of identification. A body can always be pointed to, or one can 'lay one's hand on it.' Eliminating the accidental human reference, this means that a body has locality, or *spacial position*. It is some*where*. But when we say '*it* is somewhere,' we indicate that the body does not consist of the position alone. There is something which is *at* the position, or bears to the position the relation of 'occupancy.'[1] Again, it is essential to bodies that they have a history, and thus occupy time as well as space. They are somewhere at some *time*. The relation of that which occupies space and time, to its spacial and temporal positions, may be either of two kinds. The spacial position may remain the same while the temporal position varies, in which case we speak of a body's being at *rest;* or the spacial position may vary continuously as the time varies continuously, in which case we speak of *motion*.[2] Finally, except in the hypothetical case of material points, bodies always occupy several positions simultaneously, and accordingly possess spacial *extension* and *figure*.

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[1] The best account of the relation of space, time, body, and motion is to be found in B. Russell's writings. Cf. "Is Position in Time and Space Absolute or Relative?" *Mind*, N.S., Vol. X, 1901; and *Principles of Mathematics*, Ch. LI, LIII, LIV.

[2] For the meaning of 'continuous,' cf. Russell, *op. cit.*, Ch. XXIII.

There is a certain convenience in so distinguishing 'body' and 'matter' as to use the term 'body' to mean the distinct individuals of the genus 'matter.' A body is ordinarily regarded as that which moves as a unit; as whatever portion of matter may maintain the mutual positions of its parts unchanged, while their relations to other positions are changed. It is this capacity of an extended unit to be dislocated from its context, which is ordinarily regarded as defining its boundaries. And its identity would then be regarded as unaltered so long as this independence of internal on external relations continued. It is not evident, however, that the possibility of motion is necessary for the definition of an individual body. It is strictly necessary only that a region of space should be marked by some distinguishing character that remains unchanged through time. Matter, or physical being, on the other hand, would mean any complex containing something occupying both space and time. *That which* occupies space and time is indifferent; it is the space-time occupancy that constitutes its material or physical character.[1] Matter is commonly used also in a narrower but not incompatible sense, to exclude the strictly spacial and temporal properties. In this sense, matter would mean only whatever occupies the space and time, and not the whole complex.

Summarily expressed, then, we may say that 'physical' (bodily or material) connotes two sets of properties: *spacial* and *temporal* properties on the one hand; and, on the other hand, *space-time-filling* properties.[2] The former are such as latitude and longitude, shape, date, and motion; the latter such as color, temperature, and sound. The former may be said to be the fundamental physical properties, because the latter derive their physical character from their relation to the former. It follows that physical events — the immediate subject-matter of physical science, are of two general types. There is, first, the change of spacial-temporal properties; and second, the change of space-time-filling properties: in short, change of place, and change of state. These events it is the task of science to explain.

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[1] It will, I think, be generally agreed that neither 'hardness' nor even 'impenetrability' is regarded by modern science as an essential property of matter. Cf. Sir Oliver Lodge: *Life and Matter*, pp. 24–34.

[2] I do not mention the more general logical, arithmetical and algebraic properties, such as 'order,' 'number,' etc., because these are not *distinctively* physical. See below, pp. 108–109, 310–311.

Explanation and Description in Science

§ 5. In what sense does science seek to 'explain'? Explanation is supposed to supply an answer to the question "Why?" But this interrogative pronoun suggests several questions which, in the course of the development of science, have proved irrelevant to its special interest. For many minds, and, during a considerable period, even for the scientific mind, the demand for explanation has been satisfied by the reference of an event to a *power*, regarded as sufficient to produce it. Thus before Galileo's time, terrestrial motions were accounted for by attributing them to powers of "gravity" and "levity." And similarly Kepler explained planetary motions by attributing them to celestial spirits.[1] It seemed necessary to provide an agency having a capacity for effort as great as, or greater than, the effect; and immediately present to the effect, as the soul is present to the body it moves. But Galileo and Kepler have contributed to the advancement of science only because they have added to such explanation as this, an *exact account of the process or form* of terrestrial and planetary motions. Just how *do* bodies fall and planets move? This is the question which for scientific purposes must be answered; and *only such answers have been incorporated into the growing body of scientific knowledge. Who* or *what* moves bodies, in the sense of agency or potency, is for scientific purposes a negligible question; attempts to answer it have been, in the course of the development of science, not disproved, but disregarded.

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[1] Whewell: *History of the Inductive Sciences*, third edition, Vol. I, p. 315.

And the same is true of another sense of the interrogative 'why.' It is not infrequently taken to mean, "To what end?" "For what good?" Thus, we are said to 'understand' the *beneficent* works of nature, but to 'see no reason' for vermin, disease, and crime. Or, if we do seek a reason, we find it in some indirect beneficence that may be attributed to these things, despite appearances. This is the teleological or moral type of explanation. It appears in the ancient regard for 'perfect' numbers and forms, in the Platonic principle of the Good, and in the Christian notion of Providence. But this species of explanation, too, has been not disproved, but progressively disregarded by science. It has come to be the recognized aim of science to formulate what happens, whether for better or for worse; leaving out of account, as an extra-scientific concern, whatever bearing it may have on interest.[1]

It appears, in other words, that the common distinction between explanation and 'mere description' will not strictly hold in the case of scientific procedure. For science, to explain *is* to describe — provided only that the description satisfies certain conditions.[2]

Conditions of Scientific Description

§ 6. There are two specific conditions which description must fulfil, if it is to be sufficient in the scientific sense. In the first place, scientific description must reveal *the general and constant features* of its subject-matter. It is a truism that thought tends to unify. The bare *quale* of phenomena, their peculiar individuality, gives way to certain underlying identities. Or, since natural science deals primarily with changes, bare novelty gives way to an underlying permanence. In other words, scientific thought is interested in what is the same, despite difference, or in what persists, despite change.[3]

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[1] For this purely *theoretical* motive in science, cf. above, pp. 25–28.

[2] Cf. E. Mach: "The Economical Nature of Physical Inquiry" in his *Popular Scientific Lectures*, trans. by T. J. McCormack, p. 186.

[3] As we shall presently see, this does not mean that science forces identity and permanence upon an alien chaos or flux, but only that science is interested in laying bare what identity and permanence is there.

Furthermore, science is interested in relating the difference to the identity, and the change to the permanence; showing, so far as possible, that the former is a determinate variation of the latter.

And this brings us to the second condition which scientific description must fulfil. It must be *analytical* or *exact* in its final form. This does not mean imposing such a form upon nature arbitrarily. Bodies, as we have seen, are primarily spacial and temporal, and both space and time possess what is called 'extensive' magnitude, such as 'number,' 'length,' 'breadth,' 'volume,' 'interval,' etc. Furthermore, the space-time-filling properties of bodies have a form of magnitude called 'intensive' magnitude, such as 'intensity of light,' 'degree of temperature,' etc. Changes of magnitude, whether extensive or intensive, can be *exactly* described only in mathematical terms. And underlying the strictly quantitative characters of bodies are certain more abstract characters, such as 'relation,' 'order,' 'continuity,' an exact description of which leads likewise to a mathematical or logical formulation. Where such descriptions have been obtained, as in the case of physics, we speak of 'exact science.' And such science serves as the model of scientific procedure in general.

Scientific description, then, is governed by two motives, on the one hand, unity, parsimony, or simplicity, the reduction of variety and change to as few terms as possible; and, on the other hand, exact formulation. When a scientific description satisfying these conditions is experimentally verified, it is said to be a law. And it is certain that nothing more is required for purposes of scientific explanation than *the discovery of the law*. Whether this is a sign of the degeneracy of science, or of its logical refinement, it will be our task presently to inquire.[1] But we shall be better prepared to raise this question, and we shall better understand what has gone before, if we now turn to a brief examination of certain samples of scientific procedure. The philosophical interpretation of science turns not so much upon special scientific laws, as upon the general character common to all scientific laws. And this character is most evident in the case of certain mechanical laws, which are at the same time relatively simple and relatively fundamental. I shall therefore attempt to show briefly what is meant by 'acceleration,' 'mass,' 'gravitation,' and 'energy,' in relation to the empirical facts which they are intended to describe.

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[1] See below, pp. 93–100

Illustrations of Scientific Method. Galileo's Conception of Acceleration

§ 7. It has been said that modern science came "down from heaven to earth along the inclined plane of Galileo."[1] Galileo's importance lies not only in his specific contributions to mechanics, but in the example of his method — the analytical description of motion. In order to understand the concept of *acceleration*, which Galileo employed for the description of a body's fall to the earth, let us begin with the simpler concepts which it implies. Motion, as we have seen, means a continuous change of place through a period (also continuous) of time. In other words, a body is said to move when a certain constant space-time-filling property is correlated with a continuously varying distance (d), measured from the point of origin, and a continuously varying period (t), measured from the moment of origin. The scientist, seeking to discover constancy even where it does not at first appear, and to relate the constancy to the variability, is led to conceive of a *constant proportion among these variables*. It may be, e.g., that whereas d and t change, the fraction d/t remains the same. In other words, whereas the distance and the time vary severally, it may be that the ratio, 'velocity' (v), is uniform. This does not happen to be the case with freely falling bodies. Experiment shows that even v varies. But the same procedure enabled Galileo to define a more complex ratio, v/t, or the rate of increase of velocity; and this ratio, called 'acceleration,' Galileo's experiments showed to be a constant. In other words, $v/t = g$, where g is the so-called constant of 'gravity,' that is, of acceleration at a given place on the earth's surface.

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[1] Bergson: *Creative Evolution*, trans. by A. Mitchell, p. 335. The best account of Galileo's services to science is to be found in Mach's *Science of Mechanics* (translated by T. J. McCormack). This book, W. Ostwald's *Natural Philosophy*, trans. by T. Seltzer, and K. Pearson's *Grammar of Science*, may be consulted for a more detailed statement of scientific concepts.

Now in this elementary mechanical conception of uniform acceleration, appear all the most essential principles of exact science. It is a *description* of motion, because it simply records the behavior of the falling body, and does not seek further to account for or justify it. It is an *analytical* description, because it expresses motion as a relation of the terms, such as d, t, etc., into which it can be analyzed. It is an exact description, because the terms and relations are mathematically formulated. And it is a *simplification* and *unification* of phenomena, because it has discovered a constancy or identity underlying bare differences. As we proceed to more complex concepts we shall not, I think, meet with any new principles of method as fundamental as these.

The Conception of Mass

§ 8. Galileo's constant of acceleration describes bodies falling to the *earth at a given place*. The earth is taken as a unique individual, and the difference between terrestial and celestial motions is left unrelieved. But is it not possible to regard the earth as a special case of some more general concept? Galileo regarded acceleration as the evidence of 'force.' The fact that bodies moving in relation to the earth are accelerated to it in a fixed measure, can be expressed by saying that the earth exerts a fixed force upon other bodies. But why should not other bodies also, in different but determinable degrees, exert force, that is, induce accelerations in their neighbors? In other words, why should force not be regarded as a general property of bodies, and g, or the acceleration referred to the earth, as only a special value of this property? It would then follow that the falling body would exert force on, or induce acceleration in, the earth; and that the earth would sustain like relations with other celestial bodies. There would then be a quantity possessed by every body, which would be the ratio of the acceleration it induced in another body to the acceleration which the other induced in it. Thus bodies Q^1 and Q^2 being accelerated towards one another, there would be a ratio,

$$\frac{\text{acceleration of } Q^2 \text{ to } Q^1}{\text{acceleration of } Q^1 \text{ to } Q^2}$$

This is the *mass* of Q^1 relatively to Q^2 as a standard, and so far as the motions of Q^1 as a unit are concerned, it is a constant.

Mass, in other words, is the fixed ratio of acceleration which a body possesses in relation to each other body or to some standard body. In the Newtonian mechanics this generalization of Galileo's conception is finally extended to the determination of the actual accelerations of any two bodies, in terms of their masses (m,m^1), their distance (r), and a fixed number (c), the so-called constant of gravitation. The formula for gravitation is thus expressed,

$$f = c\,\frac{mm^1}{r^2}$$

By the aid of the principle of the parallelogram of forces, which makes it possible to analyze the present orbits of the stars into component rectilinear motions, this formula brings celestial as well as terrestrial motions into one system, in which every body or configuration of bodies possesses an amount of motion exactly calculable in terms of the balance of the system. And this system means no more than the most simple and exact description of bodily motions that is verified by the facts of observation.

The Conservation of Energy

§ 9. But as yet we have dealt only with those concepts and formulas which describe the motions of bodies. What of the change of the space-time-filling properties, such as heat, light, etc? Is there any underlying identity or permanence that relates such changes to motion and to one another? The answer of science is found in the conception of the *conservation of energy.*[1]

This principle is derived historically from the Newtonian formula $ps = \frac{1}{2} mv^2$; where ps, the product of force (p), and distance (s), is the symbol for 'work,' and $\frac{1}{2} mv^2$, a function of mass (m) and velocity (v), is the symbol for *vis viva*, afterwards 'kinetic energy.' A body held at a certain distance from the earth's surface will, if allowed to fall, acquire a certain kinetic energy ($\frac{1}{2} mv^2$), proportional to the distance and the force exerted by the earth (ps). In that the falling body will acquire this kinetic energy by virtue of being simply *allowed* to fall, it is said to possess 'potential energy' (P) in its initial position. As the body falls, this potential energy decreases and is proportionally replaced by kinetic energy. Suppose the body to be suspended by a string, and to swing from a horizontal position. Then, when it has fallen as far as the string permits, it will ascend again to the same height above the earth's surface. In other words, having first lost potential energy to the extent of its vertical fall, and gained kinetic energy in its place, it will now reverse the process, and lose kinetic energy while it gains potential energy. In other words, $\frac{1}{2} mv^2 + P = c$; that is, the sum of its kinetic and its potential energies is constant, or its energy is *conserved.*

But now suppose that the string is cut, and the body allowed to fall freely. When it strikes the earth it possesses a quantity of kinetic energy sufficient under the right conditions to enable it to recover its original potential energy. In this case, however, no such reverse motion takes place; there is, supposing the bodies to be inelastic, simply an apparent disappearance of motion, accompanied by an increase of heat. Now the real fruitfulness of the principle of energy lies in the possibility of regarding this increase of heat as analogous to the regaining of its original potential energy.[1] If the analogy held this would mean that in the new system the sum of kinetic energy and heat would be a constant; or that the amount of heat replacing the lost kinetic energy would in turn yield the same amount of kinetic energy. And experiment has proved this to be the case. Similarly, it has been discovered that kinetic energy can be reciprocally and conservatively converted into light, electricity, etc.

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[1] For this conception, consult Mach: "On the Principle of the Conservation of Energy," *Popular Scientific Lectures*, p. 137.

When thus expressed, energy, like mass, is a ratio. It means that, despite the appearance of bare disjunction when motion gives place to heat, or heat to light, etc., there is a certain permanence of relations. The amount of motion, heat, light, etc., is the same *in a certain specific respect;* in the respect, namely, that when one is converted into another, the sum of the two remains the same, and the amount of the second is such as to be again convertible into the same amount of the first. This may be expressed otherwise by saying that when such a qualitative change takes place, that which is apparently lost is in a certain sense conserved, in that it exists potentially in the new quality. Thus energy, like acceleration, mass, and the rest, is a constant relationship or proportion of variable terms. And as in the case of the other concepts, so here also, the terms are functions of space and time, or of properties that occupy them; and the relationship or proportion is exact and mathematical.

The Analytical Version of Scientific Concepts

§ 10. Such is the meaning of certain typical scientific concepts, or descriptive formulas, so far as can be gathered from a direct examination of them in relation to the subject-matter which they are intended to describe. There is a question which I am sure will occur to many readers as proper and necessary to raise; the question, namely "What *really is* mass or energy?" Upon the legitimacy of this question turns the issue between naïve and critical naturalism, with which we shall be occupied in the next chapter. The question is evidently meant to convey the idea that mass and energy cannot be *merely* ratios or formulas — that they must be *things*, in some more reputable sense. But if such be the case, at any rate it does not appear in the exact records of science. There may be an antecedent play of the imagination or a speculative after-thought, in which mass is a simple substance and energy a simple activity. But as exactly formulated, and experimentally verified, mass and energy are mathematical relationships. And if this analytical version of scientific concepts will suffice in the case of the simpler concepts, there is no reason why it should not suffice also in the case of the more complex concepts.

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[1] It is not necessary to suppose that heat, electricity, etc., are mechanical, in the strict sense, i.e., constituted of internal motions. "Nothing is contained in the expression," says Mach, "but the fact of an invariable quantitative *connexion* between mechanical and other kinds of phenomena." Cf. *Principles of Mechanics*, p. 499.

When motion is described it turns out to be a definite relation to space and time, of something which occupies them jointly. Such an account of motion is not imposed upon it by any subjective predilection for a relational technique. It is empirically characteristic of a moving body to be now here, now there, and for every intermediate instant to occupy an intermediate point. The calculus of motion is merely the most faithful account of it which the mind has been able to render. The same is true of the more complex thing called velocity. It is the ratio of the distance factor and the time factor in the case of a moving body. When we pass from velocity to acceleration, mass, gravitation, and even to energy, we are simply observing and recording more complicated aspects of a moving or otherwise changing body. The analytical version of these concepts corresponds to the specfic complexity on which observation has seized. The supposition that there must be a *real* mass or energy other than the analytical complex, betrays the influence of words.[1] Because 'mass' is one word like

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[1] This supposition is also due in part to a projection of the feeling of effort into bodies which act as efficient causes. Cf. below, p. 70.

'blue,' it is felt that it must be one indivisible thing like blue. But it would be as reasonable to say that motion is an indivisible thing because the word 'motion' is single; whereas it is evident that motion contains *both* space and time, and is therefore complex. I am led to conclude, therefore, that all of these concepts are essentially ratios or relational complexes of the simple terms of experience, such as space, time, color, sound, etc.; and that each of these ratios or relational complexes expresses some specific complexity or configuration, which is found in nature. And I judge that these concepts illustrate the motive of science; which is simply to describe and record, with special reference to their unity and constancy, the actual changes of bodies.

CHAPTER IV

NAÏVE AND CRITICAL NATURALISM

The Two Varieties of Naturalism

§ 1. NATURALISM, as we have seen, is not science, but an assertion about science. More specifically, it is the assertion that scientific knowledge is final, leaving no room for extra-scientific or philosophical knowledge. Naturalism assumes two forms. On the one hand there is a variety of naturalism which adopts the traditional problems, and to a large extent the traditional methods, of philosophy. It continues, e.g., the philosophical search for a universal substance and a first cause, and claims to have discovered these in some such scientific concept as 'matter' or 'force.' The second variety of naturalism repudiates not only the solutions of the traditional philosophy, but the problems and methods as well. It condemns the search for universal substance and first cause as futile. Its last word is a theory of knowledge, in which science is asserted to be final because the only case of exact knowledge. In other words, the second variety of naturalism claims less for the concepts of a science, but nevertheless claims all. Science is not the only knowledge that has been dreamed of, but it is the only knowledge that is possible. The first variety of naturalism is metaphysical, the second proclaims its 'anti-metaphysical' character. Or the first may be called 'materialism,' and the second 'positivism.'

The crucial difference between these two forms of naturalism is to be found, I think, in what they make of scientific concepts. The first construes matter, mass, energy, and the rest, as simple substances or powers. Owing to its failure to analyze these concepts, owing to its uncritical assumption that whatever has a single name must be an indivisible *thing*, I propose to call this '*naïve naturalism.*' The second variety, on the other hand, accepts the analytical version of scientific concepts, as set forth in the last chapter, and hence may be called '*critical naturalism.*'

Naïve naturalism, metaphysical naturalism, or materialism, derives its form from philosophy — and its defects as well. Indeed it affords the best example available of the *characteristic* defects of philosophy, of those errors to which philosophy is perpetually and peculiarly liable owing to the motives which rule it. We shall, therefore, be aided both in the exposition and in the criticism of naïve naturalism if we have certain of these errors clearly in mind.

Three Characteristic Philosophical Errors. 'The Speculative Dogma'

§ 2. In the first place, there is an error to which I propose to give the name of 'the speculative dogma.'[1] By this I mean the arbitrary assertion of the ideal of thought. What that ideal is, when verbally formulated, may be inferred from our review of the procedure of science. The concepts of science satisfy thought's peculiar bias for identity and permanence. Thought seeks so far as possible to construe particulars as modes of the general, to construe what is apparently unique as a special instance of something that is common. It seeks also to account for *as much as possible* of any individual phenomenon, in terms of such a general concept. It seeks concepts, in short, that shall be both *general*, and also *sufficient* or adequate, to the things subsumed under them. Now philosophy has especially to do with ultimates and finalities. So the philosophical form of this general propensity of thought gives rise to the ideal of a concept that shall be of *unlimited generality and sufficiency.* The concepts of acceleration and mass make possible the systematization of the motion-properties of bodies. By virtue of these concepts each body is regarded as a function of all other bodies; and these concepts may thus be said to possess a high degree of generality. But because they leave the space-time-filling properties out of the account, they lack sufficiency; that is, they do not measure up to the concrete variety of an individual body's properties. They account for something of all bodies, but not for all of any body. The concept of energy, on the other hand, makes a body's motion-properties commensurable with its heat, light, sound, etc.; and thus makes the formulas of science more sufficient, that is, more exhaustive of an individual body's variety of properties. Hence it appears possible to define a maximum in both directions; a concept that shall lack nothing either in generality or sufficiency — that shall provide for everything, and for all of everything.

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[1] For a more thorough examination of this error, see below, Ch. VIII, *passim.*

Such a concept is the speculative ideal. Were it formulated and verified it would mark the consummation of thought. And it is characteristic of philosophy *to assume such a concept*, without being rigorously critical concerning either its definition or its proof. With many philosophers, perhaps with the majority of philosophers, it is simply a question of finding a content or a complete formulation for this concept, its validity as an abstract ideal being taken for granted. Philosophy is then only an attempt to find the the value of *x*, where *x* is that something of which everything is a case, and in terms of which every aspect and alteration of everything may be expressed. And speculation has given rise to an uninterrupted line of attempted solutions, from Thales's "all things are made of water," down to the present-day "monisms" of force and energy. It is the uncritical assumption that this speculative ideal is valid — that such a concept is necessary, leaving only its precise nature to be determined — that I have named 'the speculative dogma.'

§ 3. A second traditional philosophical error may conveniently be named the 'error of pseudo-simplicity.'[1] It consists in the failure to recognize the difference between the simplicity that precedes analysis, and the simplicity

[1] For this and the following error, cf. also below, pp. 261–264, 279–283.

that is revealed by analysis; between the apparent simplicity of an unanalyzed complex, and the real simplicity of the ultimate terms of analysis; or between the simplicity that is owing to the little that one knows, and that which is owing to the much that one knows.

'Pseudo-simplicity' and 'Indefinite Potentiality'

Thought begins with an undifferentiated *that*, roughly denoted by a word or gesture. The object is as yet barely distinguished. It is an undivided unity because some single character, such, for example, as its position in space or time, or a relation to some more familiar thing, has served to identify it for the purpose of discourse and investigation. But when the investigation is made, a variety of characters is discovered; and if the investigation is carried far enough, certain ultimate characters are arrived at, which will no longer yield to analysis. The object is then exhibited as a complex of simple properties, having a certain arrangement or relational unity. Meanwhile the original unity, of name, gesture, or denotative reference, hovers reminiscently in the background of the mind, and unless it is understood and discounted, it serves to discredit analysis. It endows the object with an undivided unity which contradicts the results of analysis. It construes the object as simply "*that*," whereas analysis construes it as many terms in relation. It is eventually converted into the well-known notion of 'substance' or 'essence,' and as such plays the rôle of a superior reality which analysis can never reach.

The fallacy is evident when once it is noted that this undifferentiated unity is subjective and not objective. It is the *knowledge* of the thing, which is simple, and not the thing itself. It is not the thing, but the mind of the knower, that is empty of diversity. And if it is not possible to reach this simplicity by carrying analysis *on*, it is always possible to reach it by reversing the process and returning to the initial state of innocence.

Intimately connected with this error is a third, which may be named 'the error of indefinite potentiality.' A substance or essence, construed as above, is supposed to have some necessary relation to the characters which analysis yields, and which are called its attributes. But the substance or essence as contrasted with its attributes is no more than a name, a gesture, or some one of its attributes, arbitrarily singled out for the purpose of identification. And between the essence or substance, and the cluster of its attributes, no direct relation of necessary connection is to be found. Thus one does not have a concept of an indivisible essence 'gold,' and then see that it implies 'yellowness,' 'malleability,' a certain specific gravity, etc. The relation remains arbitrary. Gold is regarded as the potentiality of these things; but there is no evidence that it is the potentiality of *just* these things, or of these things exclusively. It is an indefinite and indeterminate potentiality, a 'that which,' with the sequel unaccounted for.

How gold, simply, should reveal itself successively as 'yellow,' 'malleable,' etc., really becomes clear only when psychological terms are introduced. An organism experiencing the real complex may begin with the name, or the position, or with some associate, and *pass on to the rest*, finally overlapping the full detail. In this case the detail is not generated by the original simplicity itself; but, preexisting in the thing from the start, is gradually uncovered, or brought into consciousness. And this is a very different matter. For now while there is a transition *in consciousness* from simplicity to complexity, the thing itself has been complex all the while. Indeed the subjective simplicity owes its potentialities to the objective complexity.

These three errors have perpetually played into one another, and have begotten certain well-nigh inveterate habits in philosophical thought. The 'Absolute' or 'Ultimate,' or 'Infinite' has become a commonplace. It is already plausible and men are at once ready to entertain the idea, because of the common supposition that every individual thing has an inward indivisible essence which is its 'real' nature, as opposed to its diversity as revealed by analysis. It is an easy step from such particular essences to a universal essence. And the notion of an all-general, all-sufficient entity, that shall be all properties to all things, is readily entertained by a mind that is accustomed to the notion of indeterminate and unlimited potentialities. Such are the modes of thought characteristic of a 'metaphysics' that is unfaithful to the method of analysis.

Naïve Naturalism. Büchner's Monism of Matter

§ 4. Naïve naturalism regards 'matter,' 'force,' or 'energy' as the universal substance. Such a view is naturalistic, in that it attributes finality and universality to these concepts of physical science; and naïve, in that it puts a substantial rather than an analytical interpretation on them.

During the latter half of the nineteenth century the most influential materialist was Louis Büchner,[1] whose *Kraft und Stoff* has passed through twenty German and eight French editions. This book expressed a reaction against idealistic metaphysics caused by the rapid advance of the natural sciences.[2] The author attributes the false philosophy of the past to the abstract separation of matter and force. The former abstracted from the latter — a matter with no internal attraction and repulsion, "a being without properties," is nothing at all ("ein Unding"). The form and movement of matter constitute "its necessary attributes, and *sine qua non.*" On the other hand, force means nothing "without the modifications and movements that we perceive in matter." The absurd notion of a disembodied force is chiefly responsible for the spiritistic and creationist theories which have distinguished loose speculation from true science. "Keine Kraft ohne Stoff, — kein Stoff ohne Kraft!" The balance of the chemist proves that matter is "immortal," as the determination of the mechanical equivalent of heat by Mayer and Joule establishes the "immortality" of force.[1]

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[1] 1824–1899. The first edition of the *Kraft und Stoff* appeared in 1855.

[2] Cf. *op. cit.*, Conclusion.

In other words, matter manifests itself in force, and force in turn manifests itself in various determinate and measurable changes such as motion and heat. Matter itself is *that which* thus manifests itself. "This 'something' is what we call matter, the phenomena in question are its activities, and the cause of these activities is the force contained in the substance." What matter is *in itself* we cannot know. Hence we must not judge matter *merely* by what is known of it. Indeed since its essence escapes us, there is nothing of which it can be judged incapable. Science is constantly finding it to possess unexpected properties. As a potentiality without assignable limits, it may be as reasonably endowed with "intellectual" force as with "physical" force; and no man can foresee what further powers it may in the future reveal.[2]

Now it is evident that such a 'monism of matter' necessarily employs the notion of substance — the notion of an essence distinguished from its properties, and not defined by them. Since matter is not identified with specific properties, it is an indefinite potentiality; and were it not so, its universality or metaphysical reality could not be asserted. In short everything can be claimed for matter, just in proportion as matter is not identified with anything in particular. It is the pressure of the speculative dogma, the assumption that there must be *some* conception having unlimited generality and sufficiency, that leads the party of matter to present their favorite conception in this rôle; and to assume this rôle, matter must be divested of the specific and determinate character which is assigned to it in the limited operations of science.

§ 5. Now it happens that 'matter' is too well-known in its private capacity to play becomingly the part of Universal Being. Common sense has a comparatively clear image connected with the term. It invariably suggests spacial discreteness and juxtaposition, a tri-dimensional aggregate of units of volume bounded by hard surfaces. And if this be matter, then evidently matter is not everything. So characteristic an arrangement suggests contrasts as well as analogies; if it provides for some things, like the planetary system or the molecular structure of gases, it leaves out other things, such as color, thought, or the ether. Hence the superiority of concepts like 'force' and 'energy.' For these have not only the specific meaning which they obtain from the formulas of mechanics; they have also the vague meaning which they have when construed in terms of the inner experience of activity or effort. Common sense recoils from the notion of a matter that shall not be hard, discrete, and extended; but it is prepared to hear anything of force or energy.

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[1] *Op. cit.*, from the French translation, by Victor Dave, of the seventeenth edition, pp. 3, 46; cf. Ch. II, III, *passim*.

[2] Op. cit. pp. 43, 45, 46.

Spencer's Monism of Force

And there is a second motive which tends to the substitution of these conceptions for matter. The indestructibility of matter is proved by the fact that matter changes its form without loss of *weight*. Empirically, in other words, it is the property of weight that remains constant. But weight is a manifestation of force; and matter may therefore be regarded as one of these manifestations. Or one may argue, as the philosophers Leibniz and Berkeley have argued long since, that matter is known only by its properties, by its "forms and motions"; and if these are varieties of force, why multiply substrata or essences needlessly? Instead of conceiving a matter that manifests itself in forms and motions, why not stop at force, and invest it with finality and universality?

So the 'monism of force' replaces 'the monism of matter.' "As shown before," says Spencer, "we can not go on merging derivative truths in those wider truths from which they are derived, without reaching at least a widest truth which can be merged in no other, or derived from no other. And the relation in which it stands to the truths of science in general, shows that this truth transcending demonstration is the Persistence of Force. . . . But when we ask what this energy is, there is no answer save that it is the noumenal cause implied by the phenomenal effect. Hence the force of which we assert persistence is that Absolute Force we are obliged to postulate as the necessary correlate of the force we are conscious of. By the Persistence of Force, we really mean the persistence of some Cause which transcends our knowledge and conception. In asserting it we assert an Unconditioned Reality without beginning or end."[1]

The use of capitals in this paragraph is an expedient for ridding terms of that precision of meaning which is so fatal to the speculative interest. By 'force' one can only mean the p or f of the formulas of mechanics; but by 'Force' one can mean this together with anything else that it may prove convenient to mean. The former is one thing among others; the latter may be equal to anything and everything. We are "obliged to postulate" it, to satisfy the speculative dogma; and we are enabled to satisfy that dogma, only by reducing a determinate concept to a name, and then construing its very emptiness as signifying unlimited potentiality.

The monism of force, as has been said, derives a certain plausibility from the experience of activity or effort. It is significant that it is the *vagueness* of this experience that renders it useful in this connection. Were it a specific experience, like, e.g., that of the color blue, it would not so readily lend itself to unlimited generalization. As a matter of fact, the experience of activity may be construed in one of two ways: it may be taken in its initial or passing character as a fused experience, or it may be analyzed.[2] In the first case, it possesses simplicity just in proportion as it is not an experience *of* anything; it signifies, not the simplicity of the thing, but of the knowledge. It is, in short, a case of 'pseudo-simplicity.' In the second case, that is, when analyzed, it turns out to be a composite experience, containing specific elements in a specific configuration. Now activity in the latter sense is far too peculiar and rare to be construed as an all-general and all-sufficient principle. But activity in the former sense is indeterminate; and since the experience is familiar, it gives currency to a similarly indeterminate conception of force, which is amorphous and plastic enough to suit the speculative purpose. It is readily accepted as the principle which underlies and unites both the analyzed and determinate 'force' of physics, and the analyzed and determinate 'activity' of a strictly descriptive psychology.

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[1] Spencer (1820–1903): *First Principles* (1862), sixth edition, pp. 175–176.

[2] Cf. below pp. 261–264, 279–283.

Haeckel's Monism of Substance

§ 6. The monisms of matter and force are restated, brought up to date, and subsumed under a higher "monism of substance," by Ernst Haeckel. This author's *Riddle of the Universe* is at present both the most widely read and influential defence of materialism, and also the most perfect illustration of that doctrine's characteristic motive and besetting sins.

"Under the name of 'the law of substance,'" Haeckel embraces "two supreme laws of different origin and age — the older is the chemical law of the 'conservation of matter,' and the younger is the physical law of the 'conservation of energy.'" "The sum of matter which fills infinite space," and "the sum of force, which is at work in infinite space and produces all phenomena," are alike unchangeable. And just as all energies — heat, sound, light, electricity, and the rest, are only particular varieties of one universal energy, "*dynamodes* of a single primitive force," so the different forms of matter — chemically diverse, ponderable and imponderable, are only particular "condensations" of a "simple primitive substance, which fills the infinity of space in an unbroken continuity." But monism is not yet complete. "Matter (space-filling substance) and energy (moving force) are but two inseparable attributes" of a still more fundamental substance. And in this substance the dualism of body and mind is resolved as well. For energy and spirit are one. Spirit is at once the essence and the activity of substance; physical affinity and resistance are but rudimentary forms of inclination and aversion. "The irresistible passion that draws Edward to the sympathetic Ottilia, or Paris to Helen, and leaps over all bounds of reason and morality, is the same powerful 'unconscious' attractive force which impels the living spermatozoon to force an entrance into the ovum in the fertilization of the egg of the animal or plant — the same impetuous movement which unites two atoms of hydrogen to one atom of oxygen for the formation of a molecule of water." Thus Haeckel arrives at the animism and hylozoism with which human thought had set out some 2500 years before, the notion of an indeterminate matter, informed and animated by an indeterminate force — a cosmic generalization, in other words, of the immediate feeling of desire and self-motion. And even this is not the last substance; for it is but "the knowable aspect of things," and is relative to our senses. "We are incompetent . . . to penetrate into the innermost nature of this real world — 'the thing in itself.' "[1]

Thus the principle of substance in the end conducts Haeckel, as it conducted Büchner and Spencer, to agnosticism. And his procedure is in all essential respects the same as theirs. He consistently assumes that a simple unity corresponding to the name or initial aspect, must underlie every analyzed and relational unity. For every correlation of elements, there must be a 'that which' possesses them. And this assumption is applied to the central concepts of physics. Weight, mass, force, and energy, are properly, as we have seen, *constant ratios of variables:* mathematical proportions of the spacial, temporal, and qualitative properties of things, as these are directly observed. But with Haeckel, every such relational complex is regarded as expressing some simple essence or unique quality. Thus the Newtonian mechanics, he says, gives us only the "*dead mathematical formula*" the "*quantitative* demonstration" of the theory of force; "it gives us no insight whatever into the *qualitative* nature of the phenomena."[1] In other words, Haeckel is not satisfied with the qualitative diversity represented by the several terms into which a Newtonian formula may be analyzed. There must be a deeper and more essential quality corresponding to the formula itself. But such a quality is neither to be observed nor discovered by analysis. It is *assumed*; and once assumed, it is given a vague meaning either by reference to the subjective experience of effort, or by the lingering and confused reminiscence of its exact mechanical meaning.

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[1] Haeckel: *The Riddle of the Universe*, trans. by J. McCabe, pp. 211–213, 216, 218, 224, 292. The best reply to Haeckel is to be found in Sir Oliver Lodge, *Life and Matter*. Cf. also Fr. Paulsen: *Philosophia Militans*, p. 121, "Ernst Haeckel als Philosoph."

And it is the latter of these means on which this doctrine depends for its materialistic or anti-spiritualistic conclusions. If the qualitative essence of force and energy were interpreted in terms of psychical activity or appetency, the outcome would be a '*panpsychism*,'[2] in which it would be as reasonable to reduce mechanism to freedom as freedom to mechanism, or as reasonable to reduce matter to God as God to matter. Precisely this conclusion is reached by those who, like Bergson, approach the primeval activity-substance from the philosophical and psychological side.[3] But Haeckel's monism "definitely rules out the three central dogmas of metaphysics — God, freedom, and immortality."[4] And that such appears to be the outcome is due entirely to the remnant of definite physical meaning that still attaches to 'force' and 'energy' in Haeckel's use of them. The underlying substance, or primitive force, cannot be identified with any of its observed and described manifestations; and yet it is reached by passing *through and beyond* these. It is these manifestations so qualified as to annul their specific characters, but without destroying the suggestive power of their names. Precisely as, in the mystical theology, God's attributes transcend wisdom and goodness in their human significance, and yet retain the specific associations of these terms, and so endow God with a vague meaning; so here the primitive force, the fundamental substance, is endowed with the narrower physical meaning of terms despite the fact that that meaning strictly construed forbids the assertion of their universality. The errors of pseudo-simplicity and indefinite potentiality are meretriciously relieved of their real barrenness by the further error of 'verbal suggestion.'[1]

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[1] *Op. cit.*, p. 217.

[2] Cf. below, p. 315.

[3] See below, pp. 261–262.

[4] *Op. cit.*, p. 232.

Critical Naturalism

§ 7. Critical naturalism differs from naïve naturalism or materialism by its acceptance of what we have called 'the analytical version' of scientific concepts. This involves the rejection, on empirical grounds, of the traditional notion of substance. The term 'substance' may be retained; but if so, it is employed in a new sense, to mean a quantitative and not a qualitative constant. Thus, according to Ostwald, for example, the law of the conservation of energy expresses "the *quantitative* conservation of a thing, which may nevertheless undergo the most varied qualitative changes." "With the knowledge of this fact," he continues, "we involuntarily combine the notion that it is the 'same' thing that passes through all these transformations, and that it only changes its outward form without being changed in its essence." But such ideas "have a very doubtful side to them, since they correspond to no distinct concept." Experience affords no idea of such a qualitative essence, but only of a complex ratio that remains unchanged while its factors vary.[2]

In other words, a strictly empirical version of science reduces nature to a qualitative variety and change, exhibiting quantitative constancy. In order that such a version of science shall yield a naturalistic philosophy, it is necessary to show that nature so construed coincides with *knowable reality.* This conclusion may be arrived at in one or both of two ways. It may be argued that the ultimate qualitative terms of experience are somehow physical, or at any rate such as to permit of being explained only in terms of physical theories; or it may be argued that physical theories are the only verifiable, and so the only valid, theories. In other words, the priority of physical science may be argued from the nature of *fact* or from the nature of *method.* The former of these motives is represented by 'sensationalism,' and the latter by "experimentalism." Sensationalism and experimentalism are ordinarily united; but owing to a characteristic difference of emphasis, Karl Pearson serves to illustrate the former, and Henri Poincaré the latter.

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[1] Cf. below, pp. 180–183.

[2] W. Ostwald: *Natural Philosophy*, trans. by T. Seltzer, pp. 130–132.

The Sensationalism of Karl Pearson

§ 8. It is Pearson's central contention that the truths of science are conceptions and inferences *formed from sense-impressions.* The external object, which "at first sight appears a very simple object," turns out to be a "construct" of sensible properties, "a combination of immediate with past or stored sense-impressions." So that the field of science is "the contents of the mind." The sense-impressions constitute the only subject-matter of thought, the only reality that is directly given. The mind is shut up to sense-impressions, as a hypothetical operator who has never been outside a central telephone exchange, is shut up to the messages received at the inner end of the wire. "Turn the problem round and ponder over it as we may, beyond the sense-impression, beyond the brain terminals of the sensory nerves, we cannot get." "The 'reality,' as the metaphysicians wish to call it, at the other end of the nerve, remains unknown, and is unknowable." [1]

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[1] Karl Pearson: *Grammar of Science*, second edition, pp. 39, 41, 75, 61, 63, 67.

These sense-impressions it is the business of science to "classify and analyze, associate, and construct." The "law of nature" is "a *résumé* in mental shorthand, which replaces for us a lengthy description of the sequences among our sense-impressions." "The object served by the discovery of such laws is the economy of thought." They "enable the exertion, best calculated to preserve the race and give pleasure to the individual, to follow on the sense-impression with the least expenditure of time and of intellectual energy." A scientific concept such, for example, as the 'atom,' is either "real, that is, capable of being a direct sense-impression, or else it is ideal, that is, a purely mental conception by aid of which we are enabled to formulate natural laws." There is no ground for the assertion of an existence that is both "supersensuous" and also "real."[1]

Pearson thus apparently accepts the analysis of physical substances and forces into *non-physical* terms. And yet he finds this view to afford sufficient ground for claiming the universal and exclusive validity of natural science and according metaphysics the doubtful honor of being ranked with poetry.[2] Now upon further examination it appears that this conclusion is due to the fact that "sense-impressions" are not after all the ultimate terms of analysis, but *are themselves*, in Pearson's sense, *physical* "*constructs*." In regarding them as the ultimate terms of analysis, Pearson is virtually *assuming* the priority of the physical order. The sense-impression is a derivative of the whole naturalistic scheme, and means nothing apart from that scheme. "What we term the sense-impression" is conveyed by a sensory nerve, and is "formed at the brain." "A physical impress is the source of our stored sense-impression." The sameness of the external world depends on "the similarity in the organs of sense and in the perceptive faculty of all normal human beings"; and the consciousness of others is inferred from "physiological machinery of a

[1] *Ibid.*, pp. 66, 86, 78, 67, 96.

[2] *Ibid.*, Ch. I, *passim.*

certain character, which we sum up under brain and nerves." The "sequences of sense-impressions," "the routine of our perceptions," are not only functions of physiological nerve-stimulation, but may be conceived to have evolved as aids in "the struggle for existence."[1] It is perfectly evident, in short, that sense-impressions, in their structure and given order, presuppose the whole physical system. The real question is not how we can get "beyond the brain terminal," but how we ever came to be shut up to it. And the answer is, that in Pearson's philosophy we *assume a physiological relativism, and the whole physical world-order in terms of which such a relativism is defined.*

The Modified Position of Ernst Mach

§ 9. Much light is thrown on the dogmatic character of Pearson's naturalism by the modified position of Ernst Mach. According to this author, the physical order is essentially a *relationship* sustained by more primitive elements. "A color is a physical object so long as we consider its dependence upon its luminous source, upon other colors, upon heat, upon space, and so forth. Regarding, however, its dependence upon the retina (the elements $K\ L\ M$ . . .), it becomes a psychological object, a sensation." The bare color is neither physical nor psychical. A bullet, for example, turns yellow before a sodium lamp, red before a lithium lamp. Such a type of relationship may be represented by the symbols $A\ B\ C$. . . . But if we close the eyes or cut the optic nerve, the bullet disappears. So the bullet is also a function of a peculiar complex, the nervous system, represented by the symbols $K\ L\ M$. . . . "To this extent, and to this extent *only*, do we call $A\ B\ C$ . . . *sensations*, and regard $A\ B\ C$ as belonging to the ego." In other words, $A\ B\ C$ . . . are psychical only in so far as they belong to the specific system $A\ B\ C$ . . . $K\ L\ M$. . . . And similarly, volitions, memory-images and the like, represented by the symbols $\alpha\ \beta\ \gamma$ . . . , owe their distinctive character to the arrangement in which they are united. "The fundamental constituents of $A\ B\ C\ \ldots\ \alpha\,\beta\,\gamma\ \ldots$ would seem to be *the same* (colors, sounds, spaces, times, motor sensations . . .), and only the character of their connexion different." In other words, not only "thing, body, matter," but also "perceptions, ideas, volition, and emotion, in short the whole inner and outer world, are composed of a small number of homogeneous elements connected in relations of varying evanescence or permanence." [1]

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[1] *Ibid.* pp. 42, 63, 57, 86, 99, 103.

Now it is evidently improper to designate these elements themselves as "sensations," since a sensation is but one of the complex arrangements in which they appear. "Usually," says Mach, "these elements are called sensations. But as vestiges of a one-sided theory inhere in that term, we prefer to speak simply of *elements* (elementen)." He continues, it is true, to speak of bodies as "complexes of sensations," or definite connexions of "the sensory elements," and is thus in a measure responsible for the misunderstanding on which Pearson's sensationalism is based.[2] But it is evident that Mach's view can only mean a reduction of both the physical and the mental order to a manifold of neutral elements; that is, elements which are *neither* physical nor mental. Nor can it be said of these elements that they are inherently disposed to those particular relationships and arrangements in which they compose bodies or physical events. The orders of logic and mathematics, of mind and of conduct, stand upon the same footing as those of mechanical nature. So the analytical method inevitably leads beyond naturalism to a 'logical realism,' that is as independent of physics as it is of psychology.[3]

The Experimentalism of H. Poincaré

§ 10. Thus critical naturalism, while it is successful in its polemic against every metaphysics of substance, fails thus far to establish *itself*. Its critical motive triumphs at the expense of its naturalistic motive. There remains, however, another ground on which its claims may be urged. Even though analysis may show that the primitive realities are not physical, it may yet be argued that the physical *hypothesis* is the only verifiable hypothesis, and that the truths of physical science are the only well-authenticated truths. In other words, naturalism may be argued, not on ground of fact, but on ground of method. Thus, for example, Pearson himself asserts that "the unity of all science consists alone in its method, not in its material," and that if any fields lie beyond science, they "must lie outside any intelligible definition which can be given of the word *knowledge*."[1]

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[1] E. Mach: *Analysis of Sensations*, trans. by C. M. Williams, pp. 13–14, 17–18, 6, 18.

[2] *Ibid.* pp. 18, 192.

[3] Cf. below, pp. 310–311, 315–316.

The most notable contemporary representative of methodological naturalism or experimentalism, is Henri Poincaré. This writer's view is best comprehended in the light of its relation to the radical view of another contemporary French thinker, Edouard LeRoy. The latter, adopting the extreme 'anti-intellectualistic' position, insists upon the entire artificiality or conventionality of science, both in respect of its facts and its laws. Science is an invention for the purpose of action; and cannot, therefore, be regarded as a revelation of reality. It follows that action is prior to nature; and that action, since to define is to reconstruct and falsify, can be known only by instinct or intuition.[2] It is evident that such a conclusion is not naturalistic; and Poincaré, in the interests of naturalism, properly undertakes to criticise it. If naturalism is to be maintained, facts cannot be regarded as wholly indeterminate, for that would imply the deriving of physical nature wholly from subjective activity. It would then follow that will is prior to body, and teleology to mechanism. It is necessary, therefore, to reserve for facts *just enough determinateness to require the physical hypothesis and method*

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[1] *Op. cit.*, pp. 12, 15.

[2] See E. LeRoy: "Science et Philosophie," *Revue de Métaphysique et de Morale*, vol. VII, 1899, pp. 375 sq. Cf. Poincaré: *The Value of Science*, trans. by G. B. Halsted, pp. 112–114. For a discussion of 'anti-intellectualism,' see below, Ch. X.

for their explanation. And this is the position which Poincaré adopts. The "crude facts" are such as verify only physical hypotheses; they lend themselves only to the method of experiment. Thus our author concludes that "experiment is the sole source of truth. It alone can teach us anything new; it alone can give us certainty."[1]

Now it appears upon reflection that Poincaré's "crude fact," like Pearson's "sensation," is by no means simple; and that it predetermines the physical hypothesis, or the method of experiment, only because it is already itself invested with a physical character. In other words, Poincaré's analysis, like that of Pearson, is not complete. He believes that such is the case, when he reduces external bodies, like the ether, e.g., to *persistent relations*. "It may be said, for instance, that the ether is no less real than any external body; to say this body exists is to say that there is between the color of this body, its taste, its smell, an intimate bond, solid and persistent; to say the ether exists is to say there is a natural kinship between all the optical phenomena, and neither of the two propositions has less value than the other."[2] But he overlooks the fact that the correlation of qualities with spaces and time, is *itself* a *specific case* of more primitive relationships. This specific case, which is already physical, he simply *assumes* to be universal. Were he to follow analysis to the end, he would find that his "crude facts" presuppose certain simpler "groupings" and "kinships" that are not the subject-matter of physical experimentation at all, but of logic and mathematics.

The unique validity of the experimental method depends on an exclusive regard for the *kind* of fact for which this method is available. Experimentalism, like sensationalism, involves a vicious circle. A certain type of method is accredited by its applicability to a certain type of fact; and this type of fact, in turn, is accredited by its lending itself to a certain type of method. For the facts to which experiment or scientific verification can be applied, are limited to what is observable *in a place, at a time.* An hypothesis is tried by an 'observation'; but an observation is 'taken' at a designated time and place, and it serves as a test only so far as the space-time orientation is exact. For example, the hypothesis on which the prediction of an eclipse is based, is verified when it appears dark at a specific instant, to an observer stationed at a specific place. The appearance of darkness, not otherwise determined, would verify nothing; nor would it ever suggest a mechanical hypothesis to the mind of a scientist. Science arises as a formulation of experiences that may be non-mechanical in content; but they must be *had* within a field in which the mechanical axes of reference are already presupposed.

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[1] Poincaré: *Science and Hypothesis*, p. 101.

[2] *The Value of Science*, pp. 139–140.

An equally good illustration is afforded by another of Poincaré's examples. "I observe the deviation of a galvanometer by the aid of a movable mirror which projects a luminous image or spot on a divided scale. The crude fact is this: I see the spot displace itself on the scale, and the scientific fact is this: a current passes in the circuit." [1] A complete account of the "crude fact" would specify not only that the spot shall appear on the scale, that is, at a determined place, but at a determined instant as well; in other words, it must not be too crude to be lacking in specific spacial and temporal relations to other "crude facts." Thus Poincaré's facts are already virtually mechanical, in that they verify only such hypotheses as contain space-time variables and determine space-time events.

The Failure of Critical Naturalism. The Priority of Logic and Mathematics

§ 11. Poincaré's position is an impossible compromise. Either the facts of nature are entirely indeterminate, as LeRoy maintains; in which case the whole scheme of physical nature is improvised by man in the interests of action. Or they are determinate; in which case they are already endowed with a complex physical character, which presupposes certain simpler logical and mathematical characters. In the latter case, the categories of logic, mathematics, and physics are all alike factual and independent of the constructive activity of science. "*All the scientist creates in a fact*," says Poincaré, "*is the language in which he enunciates it*."[1] Then either science is all a matter of language, in which case it is deducible from the practical exigencies of discourse, as LeRoy would maintain; or we must limit "language" to the function of words and symbols. But logic and mathematics must then be distinguished from discourse, and regarded as themselves sciences of fact. For the truths of logic and mathematics are independent of the conventions employed to express them. We shall then be led to conclude that physical hypotheses as descriptive of physical facts, employ and presuppose logical and mathematical hypotheses, which in turn are descriptions of logical and mathematical facts. Logic and mathematics describe the nature of 'relation,' 'order,' 'dimensionality,' 'number,' and 'space'; physics studies particular cases of these. The concepts of physics are special values of the variables of logic and mathematics; the hypotheses of physics are alternatives supplied by the more abstract principles of logic and mathematics. It follows that there is no sense in which physics can be regarded as the fundamental science; nor is there any sense in which the facts which are determined by physical hypotheses can be regarded as ultimate facts. And this conclusion is fatal to naturalism. It gives to being, *in the last analysis*, a logical, rather than a physical, character; and reduces the experimental method of physics to the position of being a special instance of logical method.

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[1] *Op. cit.*, pp. 116–117.

Thus a critical philosophy of science carries one beyond physical science to simpler non-physical terms, and provides for non-physical methods and non-physical theories with which to formulate these terms. 'Color,' 'sound,'

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[1] *Op. cit.*, p. 121.

'position,' 'order,' 'magnitude,' 'implication,' none of these, nor any such relatively simple term of experience, is physical; and the truths concerning these things are far richer and more various than such as can be ascertained by physical experimentation, or described by physical theories, alone. Whatever testifies to the truth of physics testifies to the wider and more basal truths of logic and mathematics. Hence Descartes's astonishment, "that foundations so strong and solid should have no loftier superstructure reared on them."

CHAPTER V

RELIGION AND THE LIMITS OF SCIENCE

Religious Philosophy and the Limits of Science

§ 1. NATURALISM, or the claim that physical science is unqualifiedly and exclusively true, is equivalent to the denial of optimistic religion. If all being is bodily, and all causality mechanical, then there can be no support for the belief that the cosmos at large is dominated by goodness. Life is impotent; and the aspirations and hopes to which it gives rise are vain. Enlightenment destroys what the heart so fondly builds. Man is engaged in a losing fight. He may "develop a worthy civilization, capable of maintaining and constantly improving itself," but only "until the evolution of our globe shall have entered so far upon its downward course that the cosmic process resumes its sway; and, once more, the State of Nature prevails over the surface from our planet."[1]

When in the course of the last century science became so militant as to pretend to the empire of human knowledge, religion was compelled in self-defence to challenge its title. And once roused to arms, religion not unnaturally sought to carry the war into the enemy's territory. The result was to establish a habit of suspicion and hostility between the party of science and the party of religion. They became hereditary enemies.[2] There are already signs of the dawn of a new era; perhaps the time is not distant when the lion and the lamb shall lie down together. But at present it is still generally assumed that the success of religion is conditioned by the failure of science. The major part of contemporary religious philosophy is devoted to a disproof of science. If there is to be "room for faith," that room must be gained at the expense of science. When a scientist confesses failure, as when Du Bois-Reymond pronounces his "ignorabimus" concerning the relation between matter and consciousness, he is charged with treason by the partisans of science, but is eagerly quoted and followed by those of religion.[1]

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[1] Huxley: *Evolution and Ethics*, p. 45.

[2] See above, pp. 34-38.

Now it must be admitted that religion's instinctive distrust of science has a basis in reason. It is true, as we shall presently see, that nothing could be more fatuous than the hostility of religion to science. For both are human institutions; and whether a man be a scientist or a theologian, he *needs both*. Nevertheless, religion of the optimistic type, the belief that civilization dominates and eventually possesses the cosmic process, cannot survive, if the scientific version of things be accepted without reservations. Faith can be justified only provided limits be assigned to science. And religion will be wise to avoid any reconciliation in which it is made dependent on the indulgence of science.

There is some disposition at present to invest religious capital in scientific novelties. Science now employs concepts that seem less forbidding than its classic atomism. May not energy, or the electrically charged ether, or radioactivity, turn out to be the essence of God, or of man's immortal soul? There are two reasons for distrusting such suggestions. In the first place, they derive whatever religious meaning they possess from a loose and anthropomorphic version of science, and not from its rigorous formulation. In order that these scientific concepts shall serve as hints of a 'spirit' in nature, they must be construed as substances and invested with characters drawn from the confused feeling of effort.[2] Religion will indeed be reduced to extremities when it is dependent on the vagaries of the scientific imagination.

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[1] E. Du Bois-Reymond: *Uber die Grenzen des Naturerkennens*, an address at the Scientific Congress at Leipzig, 1872; cf. ninth edition, p. 51. For the sequel, cf. Haeckel: *Riddle of the Universe*, p. 180 sq.; Fr. Paulsen: *Introduction to Philosophy*, trans. by F. Thilly, p. 77; James: *Human Immortality*, p. 21; etc.

[2] See above, pp. 71–72.

In the second place, even though such scientific concepts were converted into spiritual substances, they would still yield no profit to religion. Hylozoism, or even panpsychism, as a theory of the ultimate matter, is for religious purposes no better than atomism, and no worse. Religion is indifferent to the question of substance. For religion is made of hope and fear; it is a solicitude for certain values. Its justification requires that the cosmos, whatever it be made of, shall in the end yield to desires and ideals — shall in short, be good. And this requirement the new science satisfies no better than the old. For science does not deal with value, but with the *quantitative constancies exhibited in natural processes*. Whether these processes take place for better or for worse, it does not inquire.[1] The explanation by ends, the reference of events to purposes, it seeks to dispense with altogether. A philosophy of religion must itself add the judgment of value. If faith is to be justified, it must be shown that *the good determines* events and is not a mere phosphorescent glimmer on their surface.[2] Science does not deny any such conclusions; but neither will science be led to any such conclusion — for the reason that its subject-matter and its methods do not permit. The intensive cultivation of science has led, and will always lead, to the rejection of religious hypotheses as irrelevant. In terms of its 'facts,' and its experimental technique, such hypotheses are unwarranted and unverifiable.

The philosophical justification of optimistic religion involves, then, a critique of science; not a refutation of science, but a delimitation of science—a proof that science, strictly construed, is *not all*. The critique of science thus constitutes the religious sequel to science; and we shall pass in review the several contentions upon which such a critique is at present based.

§ 2. Before dealing with the criticisms of science that are peculiarly characteristic of contemporary philosophy, I desire briefly to allude to a method of criticism that was once common, but is now obsolescent. I refer to the argument for miracles. A miracle is a breach of scientific law; that is, the failure of a scientific law to obtain *within its proper field.* Thus a motion that did not obey the laws of motion would be a miracle; as would a Euclidean triangle that did not conform to the theorems of Euclidean geometry. But the notion of a miracle in this sense reflects an antiquated conception of natural law. When laws were thought of as divorced from their subject-matter, and imposed upon it from without, it was possible to think of their being obeyed or disobeyed without ceasing to 'hold.'[1] But scientific laws are now understood to be *descriptions* of their subject-matter. And there can be no such thing as a breach of the law, in this sense. For if things do not behave as the law stipulates, it follows that the law is incorrect. Were a Euclidean triangle found whose interior angles were not equal to 180°, it would be necessary to retract the corresponding theorem; and were there empirical evidence of a word's converting water into wine, it would be necessary to amend the laws of chemistry to meet the case. For when an event falls under the terms of the law, it constitutes one of the data which the law purports to describe, and which it must describe if it is to be a law at all.

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[1] Cf. above, pp. 25–28.

[2] Cf. below, pp. 341–342.

Naturalism and Supernaturalism

The disputes between science and religion in the age that has just passed have turned largely upon this issue. The successive defeats of religion have been due to the fact that its defenders have put it in a false position. The validity of religion has been made to turn upon the failure of science *within its own field.* And naturally enough, the apologists of religion have, within that field, been no match for their scientific opponents. The Copernican hypothesis of the motion of the earth, the nebular hypothesis of its origin, and the geological hypothesis of its age and history, were arrived at by regarding the earth as a natural body like other natural bodies. Religion, starting from the unique place of the earth in the historical drama of salvation, was led to assert its uniqueness in other respects also. There resulted the ambiguous and untenable position of acknowledging the earth's bodily character, and at the same time declining to apply to it the conclusions of those who, without ulterior motive, and with the maximum of skill and information, devoted themselves to the study of bodies.

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[1] Cf. K. Pearson's *Grammar of Science,* Ch. III, *passim.*

The same thing happened in the case of man. His bodily functions come within the range of statics, hydrodynamics, aerodynamics, and chemistry; while as an animal organism, he belongs to the subject-matter of biology and physiological psychology. And similarly the Scriptures, as historical documents, must necessarily be submitted to the methods of historical, archæological, and philological research. The apologists of religion made the mistake of disputing the findings of these several sciences, and undertook an unequal contest with experts in their own fields of study. The result was inevitable. Science, because free from ulterior motives, and superior in technique, prevailed; and religion, regarded as an ineffectual protest against advancing enlightenment, lost prestige.[1]

The General Character of Contemporary Criticism of Science

§ 3. It is characteristic of the contemporary critique of science to accept science *as a whole*. The philosophy of religion no longer attempts to meet science on its own grounds, and to dispute questions of detail that lie within its province. It is admitted that, relatively to its method and subject-matter, the verdict of science is final and unimpeachable. Science must be dealt with as a system which is complete in its own terms. The difference between science and religion no longer turns upon questions of fact, but upon a fundamental question of point of view or method.

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[1] Cf. Andrew D. White's *A History of the Warfare of Science with Theology in Christendom, passim.*

Religion must accept, once for all, "the concatenation of phenomena"; and abandon the "self-contradictory religious supernaturalism" that "attempts self-satisfaction by transfiguring a fragment torn from the temporal series of history." Religion and true philosophy do not abide here but in the "eternal."[1] We must concede the scientist's claim of the universal ramification of "causal connections"; but the hope of deliverance lies in the immediate qualification—"*so far as the scientific interest is concerned.*" For the scientist forgets "that all this causal explanation has no meaning whatsoever, and his statements no truth, and his universe no reality, if he and we are not presupposing an idealistic belief in those absolute standards of eternal values by which we can discriminate the true and untrue, the good and the bad, the real and the unreal."[2] "The deepest and most thorough reconciliation of Science and Religion which it is possible to conceive," says another philosopher, "puts an end in principle to the unworthy bickerings between them about the territories of each, and the futile attempts at the delimitation of their borders," permitting "each to claim the *whole* of experience — *in its own fashion.*" "Science may justly deal with all things . . . so may Religion." But there is a deeper ground for both, since "both are means of transmuting the crude 'matter' of 'appearance' into forms better, truer, more beautiful and more real."[3]

Thus it may be said that the religio-philosophical critique of science has on the whole abandoned the old supernaturalistic ground. In other words, it no longer attempts to make exceptions, and to dispute the rule of natural law in specific localities of nature. The integrity of science is acknowledged, and whatever criticism is urged against science is urged against it as a system.

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[1] R. M. Wenley: *Modern Thought and the Crisis in Belief*, pp. 78, 229, 228.

[2] H. Münsterberg: *Science and Idealism*, p. 70 (italics mine).

[3] F. C. S. Schiller: *Riddles of the Sphinx*, third edition, pp. 463–464 (last italics mine).

The Fallibility of Science

§ 4. But the old warfare between science and religion has not wholly ceased. There is a lingering spirit of hostility that still stands in the way of mutual sympathy and understanding. It appears on the side of science, in the 'anti-metaphysical' polemics of such writers as Pearson, and in the irreverent animus of such writers as Haeckel. On the side of religious philosophy it appears in a disposition to disparage science, to belittle its achievements, and exploit its failures and shortcomings.

This disposition pervades what is perhaps the most monumental critique of science that has recently appeared in the English language — James Ward's *Naturalism and Agnosticism.* While this book aims to refute naturalism rather than science, the author nevertheless repeatedly argues from the incomplete success of science.[1] He points out the "lacunæ" of science, such as the gap between the organic and the inorganic realms. He reminds us, in other words, that there are scientific problems that the scientist has not yet solved! He suggests contradictions within the body of scientific truth; and dwells upon the uncertainty of scientific hypotheses that are not as yet completely verified. As if all human knowledge did not, at any historical moment, have its residual ignorance, its outstanding difficulties, its transitive phrases, and its haunting doubts! Indeed, the frankness with which science has avowed these limitations — these penalties of human frailty, and risks of human temerity — merits confidence and not distrust.

Professor Ward finds evidence of the unreliability of science above all in the fact that its theories must perpetually submit to correction. He quotes Boltzmann: "Today the battle of opinion rages tempestuously. . . . What will the outcome be? . . . Will mechanical models in any case persist, or will new, non-mechanical models prove better adapted, and the component factors of energy control absolutely the domain? . . . Is it possible that the conviction will ever arise that certain representations are *per se* exempt from displacement by simpler and more comprehensive ones, that they are *true?* Or is it perhaps the best conception of the future to imagine something of which one has absolutely no conception?" And the author concludes a criticism of Principal Rücker with the comment, "after all, then, he is only defending a working hypothesis, and one, moreover, that has lost greatly in prestige in the last half century."[1]

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[1] The reader may be interested in referring to the replies of J. E. Creighton, and of Professor Ward himself, to this criticism. Cf. *Journal of Phil., Psych., and Scientific Methods*, Vol. I (1904), Nos. 10, 12. The present writer's rejoinder, from which parts of the present text are drawn, appeared in the same *Journal*, Vol. I, No. 13.

Now the folly of such arguments lies in the fact that they can be urged with equal force against any human pretension. It amounts, all of it, to no more than the hoary commonplace that mortal mind is fallible. Any assertion whatsoever may prove to be mistaken, even Professor Ward's criticisms, and the "Spiritual Monism" of his own adoption. This fact of human fallibility, since it may be urged against all knowledge, cannot be urged against any. It justifies a certain modesty and open-mindedness in thinkers, but can never constitute ground for the rejection of any particular theory. Knowledge can be disproved only by better knowledge. If a specific scientific theory is doubtful, well and good; but it can justly be regarded as doubtful only *for scientific reasons*, and these had best be left to the scientist himself. It is scarcely necessary to add, that if variety and change of opinion are to be urged against any branch of knowledge, the philosopher of religion can least afford to urge them. For of all cognitive enterprises his is on this score the most in need of indulgence.

Where the general fallibility of human knowledge is urged against a special branch of knowledge, it betrays an over-eager and blind partisanship. An apologist for religious orthodoxy writes as follows: "Men of science may be right or wrong in their deductions from the fragmentary information possessed by them. Generally they are wrong, as is clearly enough shown by the fact that a large part of the work of each generation of men of science consists in overturning or modifying the theories of their predecessors." Hence "the utter futility of setting up the deductions of the human reason against the assertions of the Word of God."[1] To such ideas as these Professor Ward virtually gives countenance. But how reactionary, and how fatuous! Science and religion are both institutions which serve man. A religious believer, since he is a man, needs science; as a scientist needs religion. Hence a philosopher of religion who seeks to discredit science, injures himself. He abets a domestic quarrel. There can be no victories for science that do not promote man and all his works, including religion; nor any defeat of science that is not a common disaster. For science and religion are the supporting wings of one army engaged in the conquest of ignorance and death.

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[1] *Naturalism and Agnosticism*, second edition, Vol. I, pp. 307, 314.

The Disparagement of the Descriptive Method

§ 5. The criticisms of science to which I shall now invite attention avoid in the main both the obsolete policy of interfering in the affairs of science and the obsolescent animus of partisan strife. Science is to be acknowledged as unimpeachable when it acts within its proper sphere; and is admitted to friendly alliance with philosophy and religion. But it is held to be inherently lacking in self-sufficiency and finality. It *presupposes* something else; and that which it presupposes is more fundamental, or more 'real,' and confers priority on philosophy and religion.

I shall first consider what may be regarded as the *methodological* critique of science.[2] According to this critique the concepts of science are 'mere' descriptions, and the laws of science hypothetical or 'contingent.' Science, although systematic and complete in its own terms, cannot, owing to the nature of its method, yield reality. Its findings are true only in the limited sense of being convenient. They are not necessary, but only expedient. Like conventions, with which they may be classed, they are not inevitable, but optional and arbitrary.

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[1] P. Mauro: "Life in the Word," published in a series of pamphlets issued in defence of Christian orthodoxy, and entitled *The Fundamentals*, Vol. V, p. 47.

[2] This critique is intimately connected with the pragmatist's attack upon "intellectualism," and will receive further treatment in Chapter X.

It is significant that this critique of science is based upon the acceptance of what I have called 'the analytical version' of scientific concepts.[1] It urges against science the very refinement and exactness of its method. That which in the judgment of critical naturalism commends science, and justifies its exclusive claim to the title of knowledge, is here regarded as a deficiency.

James Ward, again, will serve as an illustration. This author traces with admirable lucidity the development which such conceptions as 'matter,' 'mass,' 'force,' and 'energy' have undergone in the history of science. He finds that these terms now connote factors in the exact calculations and formulas of science, and are no longer charged with the vague ontological predicates of common sense. So far the author's exposition is unexceptionable and instructive. But somehow at the same time that science has been growing more exact, it has lost its hold upon reality. "To distinguish them from the old school, whom we may fairly term physical realists, we might call the new school physical symbolists. . . . The one believes that it is getting nearer to the ultimate reality, and leaving mere appearances behind it: the other believes that it is only substituting a generalized descriptive scheme that is intellectually manageable, for the complexity of concrete facts which altogether overtask our comprehension." To this symbolistic version of modern science, Professor Ward subscribes. He quotes

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But it is by no means peculiar to pragmatism; it is, in fact, employed by the great majority of contemporary opponents of naturalism.

[1] Cf. above, pp. 60–62.

approvingly Karl Pearson's characterization of scientific laws as "conceptual shorthand." Or as he himself expresses it, "the conception of mechanism enables us to summarize details that would otherwise bewilder us," but "this cannot possibly nullify our independence." "Such conceptions may furnish an admirable descriptive scheme of 'the motions that occur in nature,' but they explain nothing." "In short, one may take it as definitely conceded by the physicists themselves that descriptive hypothesis takes the place of real theory."[1]

But what can this disparagement of description possibly mean? Is it possible to mention any motive of thought more completely governed by the nature of its subject-matter than the motive of description? Description means the reporting *of things as they are found.* The gradual substitution, in the procedure of Science, of description for 'explanation,' means simply that science has grown more rigorously empirical. 'Explanation,' as contrasted with description, suggests a reference to trans-experiential powers, and mysterious essences, or a one-sided version of things in terms of human interests.[2] Science has abandoned explanation in this sense, because such attempts diverted the attention from its proper subject-matter, and engaged it in irrelevant speculation. If we are to believe some of the critics of science, description is a sort of game, and the adoption of this method a sort of senile playfulness that has overtaken science in its degeneracy. It happens, however, that this descriptive period of science is the period of its most brilliant successes. And science is of all branches of human knowledge the one in which caprice is most fatal. For science is engaged at close quarters; dealing as it does with the proximate environment, its findings are promptly verified, or discredited; its day of judgment is always near at hand. It is impossible that science should have succeeded, save by a scrupulous fidelity to fact. This is what the descriptive method properly signifies. It is a discriminating disregard of the irrelevant, and a single-minded renunciation of ulterior motives.

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[1] James Ward: *op. cit.*, Vol. I, pp. 304–305, 83; Vol. II, pp. 251, 88–89, 73.

[2] See above, pp. 53, 54.

And yet Professor Ward would have us believe that description is somehow arbitrary, that it does not necessarily reflect the nature of things. "To suppose," he says, "that the rigorous determinism deducible from the abstract scheme — for the simple reason that it has been put into its fundamental premises — *must* apply also to the real world it has been devised to describe, is just as absurd as — to take a very trivial illustration — it would be to say that a man must fit his coat, and not that the coat must fit the man."[1] As though a coat could be *fitted* to a man without the man's fitting the coat, or a scheme be "devised to describe," the real world without "applying" to it!

The Ideal of Descriptive Economy

§ 6. But what, it may be objected, are we to make of the formal criteria of the descriptive method, such, e.g., as simplicity? Is this not, after all, an æsthetic or subjective criterion, a matter of convenience, rather than a revelation of reality? Professor Ward can quote scientists, in their capacity as exponents of naturalism, in support of such a view. But does *science* justify such a view?

In the first place, it is necessary to distinguish within the system of science itself, between written symbols or signs, and the concepts, ratios, and laws to which they refer. There is evidently a difference between the Greek letter π, or the mark $\sqrt{}$, and *what these signs mean.* Signs are conventions, arbitrarily chosen and agreed on; and their abbreviation of complexity is a matter of convenience. But this does not in the least affect the status of the things which the signs mean. Because the signs which I use in the equation, $2+2=4$, are arabic, lower font, etc., I am not justified in concluding that the numerical equality expressed is similarly contingent on the choice of language and type.

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[1] *Op. cit.*, Vol. II, pp. 67–68.

Yet this confusion, obvious as it is, has played no small part in the notion that descriptive analysis is artificial and unreal.[1]

If it be admitted that the formulas of scientific description express definite logical and mathematical relationships, whose meaning and truth is independent of the exigencies of discourse, it may yet be contended that the application of these relationships to nature is arbitrary. I can only reply that just these relations are found to subsist in nature; if they were not, the scientist would not account them verified. If it be objected that nature never *exactly* corresponds to such formula, I may then ask for specific cases. And when the disparity between the case and the formula is pointed out, some new and similar formula will be at the same time exhibited.[2]

But, it may be asked, does not the formula always leave something out; does it not, for the sake of practical convenience, always over-simplify nature? Of course it leaves something out. In empirical procedure, it is as important to omit the irrelevant as to include that which is germane. And it is further true, as has been stated above,[3] that science is peculiarly, if not exclusively, interested in discovering identities and constants. And these find expression in the formulas of science to the exclusion of individual differences. But it does not follow that this procedure involves *over*-simplification. For that would mean either that the formulas omit something which they intend to cover; or that the identities and constants they do cover are not actually present in nature. But neither of the charges can be substantiated.[4] Science abstracts, but does so deliberately. And to abstract is not to invent or falsify — but only to discriminate and select.

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[1] See below, pp. 232–234. [2] See below, pp. 236–237. [3] See pp. 54–55.

[4] Were science to assert that nature is *only* what is expressed in the formula, it would be guilty of what James calls "vicious intellectualism." As a matter of fact science makes no such assertion. On the contrary it specifically provides for individual differences by its use of 'variables.' See below, pp. 234–235.

It will appear, in short, that the ideal of 'descriptive economy' is not a fantastic hobby, but a canon of knowledge. The discovery of this ideal has not debased science, but has enriched logic and methodology. Through adopting it, science has not departed from reality, but has acquired a closer and more sure grasp of reality.

The Option of Hypotheses

§ 7. There is one further charge against the descriptive method, that is held to involve not only physical science, but logic and mathematics as well. It is said that the *choice of hypotheses is optional.*[1] Now as respects physical science, it is clear that this option has to do with the preliminary stages of investigation, and not with the conclusion finally adopted. The trial of a hypothesis is optional; but its success, or verification, is determined. Furthermore, the internal relations of the hypothesis itself are determined. The hypothesis selected for trial must be logically and mathematically correct.

But it may now be urged that logical and mathematical correctness is optional. And this consideration assumes a growing importance in the light of recent developments in the philosophy of mathematics. It is often said that logical and mathematical truths depend on *the arbitrary selection of postulates.*[2] Time will show, I believe, that such expressions are one-sided, and, when taken unqualifiedly, misleading. There are evidently compensating considerations. In the first place, no logician and mathematician, however modern he may be, invents postulates in order to build systems on them; like the physical scientist, he *searches for the postulates that will determine certain facts.* As a recent writer expresses it, while postulates are not 'necessary *from*," they are "necessary *for;* namely, for the solution of the problem."[1] So postulates are in the end *verified*, and not merely chosen. In the second place, there are well recognized canons or criteria, by which postulates may be judged, such as 'purity,' 'consistency,' 'independence,' etc.[2] And finally, all systems, whether the postulates be chosen or not, are made up of terms, relations, propositions and implications, which, whatever is done with them, are certainly not chosen *to be what they are*. In short, here, as elsewhere, thought accommodates itself to things, and its option is confined to selection from among them.

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[1] Cf. e.g. F. C. S. Schiller: "Axioms as Postulates," in *Personal Idealism.* Cf. on the other hand, T. P. Nunn: *The Aims of Scientific Method*, Ch. V.

[2] Cf. e.g. E. V. Huntington: "Sets of Independent Postulates for the Algebra of Logic," *Transactions of the Amer. Math. Soc.*, Vol. V, 1904. "These postulates are simply *conditions* arbitrarily imposed on the fundamental concepts," etc. (p. 290). Cf. also Poincaré: *Science and Hypothesis*, pp. 37–39.

The 'Real' Cause, and 'Mere' Description

§ 8. In the background of every mind that hesitates to accept the descriptive method as valid and adequate, will be found one or both of the notions of *explanation* which science has gradually abandoned, the notion of 'power' or the notion of 'good.'[3] More commonly the two will be fused in the notion of 'activity.' This is regarded as the *real* cause, by which 'mere' description is judged and found wanting.[4] It becomes a question as to whether the development of scientific method has thrown light on the meaning of 'cause'; or has simply abandoned it. The answer depends, evidently, on the validity of this extra-scientific notion of cause, which science once employed, and which is now defended by the critics of science.

The notion depends entirely upon the inner experience of activity. Fortunately this issue cannot be argued at length. A man must look for himself, as Hume did, and see whether he finds in the depths of his own nature, *a power to do*, which is clear, simple, and self-sufficient. He who makes the experiment, and resolutely declines to accept the confusion and vagueness of familiar immediacy as profound insight, will, I believe, conclude as Hume did.

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[1] Karl Schmidt: "Critique of Cognition and its Principles." *Jour. of Phil., Psych., and Scientific Methods*, Vol. VI (1909), pp. 281–282.

[2] Cf. Schmidt, *op. cit.*, *passim*.

[3] See above, pp. 53–54.

[4] Cf. e.g. James Ward: *op. cit.*, Vol. I, p. 64; Vol. II, pp. 79, 237, 247.

He will find sensations of bodily tensions, feelings of expectancy, etc., but no 'power.'[1] In other words, he will find what empirical analysis finds everywhere, *a manifold of terms in relation*. And when one proceeds to explain such a manifold, one will be led, as science in its field has been led, to the discovery of *descriptive laws*.

I conclude, in other words, that in adopting the descriptive method, science has exchanged a naïve and hasty notion of cause for a refined and rigorous notion. In the sense of the term that is most intelligible, the cause is *the law*, or its implication. Not necessarily the *mechanical* law; for analysis and description is, as we have seen, by no means limited to the type exhibited in physical science. But a logical cause, a mathematical cause, an ethical cause, will, I believe, turn out, in each case, to be a law or constant.[2] And if this is so, science is to be credited with the descriptive method, and not debited.

The Unreality of Space and Time. The Kantian Argument

§ 9. The critique of science which has just been examined might be termed a 'methodological' critique, as distinguished from the 'metaphysical' critique to which we must now turn. According to this critique, science has to do with 'appearance' or 'phenomenon' rather than 'reality,' because of the nature of its basal concepts, *space* and *time*. These concepts, it is argued, are inherently contradictory or lacking in self-sufficiency; and physical nature, as the realm of space and time, must be supposed to be in the end resolved into something else. They must be corrected, or 'overcome,' in some higher unity, as evil is held to be transmuted into good in the providence of God.

The classic prototype of this critique is to be found in Kant.[3] According to that writer, space and time are vitiated by "antinomies." This means that on the supposition of the reality of space and time, it is possible to prove, with equal certainty, several contradictory pairs of theses and counter-theses; such as that space has boundaries and has not, time has a beginning and has not, space and time have indivisible elements and have not, etc. The moral, according to Kant, is that we must reject the original supposition, and deny the reality of space and time. If we regard them merely as acts of synthesis, they become indeterminate; or rather they derive their determination from something else, such as the subject-matter to be synthesized, or the motive actuating the operation of synthesis. It is like saying that number is not independently real, but is only the operation of counting. The question as to how many numbers there are will then have no meaning. There will be as many numbers as the material counted requires, or as any one has occasion to enumerate. Similarly, space and time are held to conform to the subject-matter to which they are applied, or to the motive governing their employment. And it is in terms of these non-spacial and non-temporal factors, in terms of something 'higher' than nature or outside of it, that the world assumes its final shape.

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[1] See below, pp. 261–264. Cf. Hume: *Enquiry Concerning the Human Understanding*, Selby-Bigge's edition, pp. 60–73.

[2] For a discussion of the application to ethics see below, pp. 116–117.

[3] Bergson's critique of time is a blend of the methodological and metaphysical critiques; it is examined below, pp. 230, 234–235, 255–261. For Kant, cf. *Critique of Pure Reason*, Max Müller's translation, second edition, pp. 328 sq.

In more recent times the supposed paradoxes of space and time have been traced back to a more fundamental paradox involved in 'term' and 'relation.' It is argued that if two terms are to be related, they must each be related to the relation, and since these interpolated relations must again be related, we are launched upon an infinite regress. Thus the English idealist, F. H. Bradley, is brought to the conclusion "that a relational way of thought — any one that moves by the machinery of terms and relations — must give appearance, and not truth."[1] Or, as his disciple, A. E. Taylor, puts it, it is in some "supra-relational" mode of experience, in which even the concept of whole and part has been transcended,

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[1] *Appearance and Reality*, first edition, p. 33; cf. Ch. III, *passim*.

"that we come nearest to experiencing the real as it really is."[1] Since the space-time world is essentially relational, and affords the most perfect instance of the concept of whole and part, it is thus discredited, without entering into the further difficulties added by space and time themselves. Since, however, the critique of relations does not apply exclusively to science, but applies equally to all knowledge employing the analytical method, one need not undertake the examination of it here. Suffice it to say that Bradley's view has been repeatedly refuted, not only by "outsiders," but by fellow-idealists who are in thorough accord with his general philosophical position.[2]

A characteristic contemporary revival of the Kantian proof of the unreality of space and time is to be found in A. E. Taylor's *Elements of Metaphysics*, from which I have already quoted. The supposition of the reality of space and time places us in the following dilemma. "We must either arbitrarily refuse to continue the indefinite regress beyond the point at which its difficulties become apparent, as is done by the assertion that space and time have finite bounds or indivisible parts, or we must hold that the absolute experience actually achieves the summation of an unending series." But "with the recognition that space and time are phenomenal, . . . the difficulty disappears." For we may now say "that space and time, being constructions of our own, are *really* neither finite nor infinite series, but are the one or the other according to the purposes for which we use our construction." In other words, of space and time *per se*, we can say neither that they have, or have not, boundaries and indivisible parts. They may be regarded in the one way or in the other, according to the exigencies of thought. In themselves they are ambiguous. And we relieve ourselves of further responsibility in the matter

[1] *Elements of Metaphysics*, pp. 147, 153; cf. Ch. IV.

[2] Cf. below, pp. 157–158. The best refutation of Bradley is to be found in James's *Pluralistic Universe*, Appendix A, "The Thing and its Relations," *passim*. For an idealistic reply to Bradley, cf. J. Royce: *The World and the Individual*, Vol. I, Supplementary Essay.

by concluding that this ambiguity proves that in "the absolute experience" they must be "taken up, rearranged, and transcended" — although "precisely *how* this is effected, we, from our finite standpoint, cannot presume to say."[1]

Infinity and Continuity

§ 10. Now what shall we say of this argument? In the first place, it is notable and significant that the problems of infinity and continuity, which underlie the 'paradoxes' of space and time, are today receiving marked attention from logicians and mathematicians who have no metaphysical predilections. These writers, having no "absolute experience" to which to relegate their difficulties, are compelled to overcome them for themselves. They proceed upon the naïve assumption that since there *are* such things as infinity and continuity, whatever place they may turn out afterwards to hold in the universe at large, it must be possible to examine and describe them. The conclusions which they have reached may for our present purpose be expressed very simply.[2]

In the first place, it is held that the alternatives which constitute a dilemma for Kant, Taylor, *et al.*, are not strictly coördinate. For the objection to one is empirical, while the objection to the other is dialectical. Thus, for example, the least unit of spacial extension that can be observed or defined is evidently divisible by two. *There is no gainsaying the fact.* On the other hand, if one asserts this and concludes that spacial extension is always divisible, his opponent cannot point out that such is not the fact, but only that it contradicts some preconceived notion, such as, *a whole is made up of parts*, etc. Empirically, then, it seems proper to conclude that since space is in point of fact infinitely divisible, we must, if necessary, amend the notions which it contradicts.[1] In other words, non-metaphysical mathematicians and logicians agree that space and time are infinite, and devote themselves on the one hand to the description of the fact, and on the other hand to the removal of the dialectical difficulties that it involves.

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[1] A. E. Taylor, *op. cit.*, pp. 260, 263. I have discussed this writer's position more fully in *Mind*, N. S., Vol. XVI, 1908.

[2] For full details, the reader may consult B. Russell's *Principles of Mathematics*, Ch. XLII, XLIII; or E. V. Huntington's "The Continuum as a Type of Order," in the *Annals of Mathematics*, Vols. VI, VII (1905).

Thus it is contended that the notion of a whole as 'made up of parts' involves a confusion between the notion of a whole as *containing* its parts, and a whole as *arrived at* by the successive enumeration and synthesis of its parts. The latter notion is subjective and accidental. We may, for example, define a line as an infinite class of points. It is true that a line cannot be 'made up' by adding point to point, but why should it be, since we can *define it as a whole?* An infinite series cannot be exhausted by the successive enumeration of its terms; but why should it be, when we can *define the law of the series?* In other words, there is no paradox in knowing an infinite whole, once we rid ourselves of the notion that to know means to take a *successive inventory* of the content.

Or consider the ancient paradox of motion.[2] It is held that Achilles cannot overtake the tortoise, because he can cut down the tortoise's lead only by an infinite, that is, endless, series of diminishing gaps. But this simply means that the operation of *overtaking* is a continuous process. If it were necessary for us to understand this process by enumerating every least phase of it, we should never conclude, and would be brought in despair to say that Achilles *never can* overtake the tortoise. But we need do nothing of the kind, since we can *define* the particular series in question, and provide by formula for all of its terms. And if it be objected that Achilles, at least, in traversing the intervening space, must successively pass through all of its least units, we may reply that he has a like infinitely divisible time in which to do it.

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[1] It may even be necessary to conclude, contrary to the usual notion, that a part may in a certain sense be equal to the whole. Cf. e.g. Royce: *The World and the Individual*, Vol. I, Supplementary Essay. I am not sure that this is the case; but it might be the case. In other words, the notion of whole and part is subject to correction in the light of any instances of it that may be observed; and an 'infinite' and 'continuous' whole is such an instance.

[2] For an interesting popular discussion of this and similar paradoxes in the light of modern mathematics, cf. James: *Some Problems of Philosophy*, Chap. X, XI. What follows above is in part a criticism of this author's view.

This very meagre treatment of the matter will serve, I trust, to suggest the method by which the seeming paradoxes of space and time may be dispelled. Such a method serves not only to throw light on the nature of space and time, and so to save the already over-burdened 'absolute' from the necessity of assuming entire responsibility for them; but it also justifies space and time, and establishes their reality in their own terms. In short, if science be defective or limited, it is not because space and time, its fundamental concepts, are unreal.

The Priority of Consciousness

§ 11. The most important critique of science is yet to be considered: that critique, namely, which rests on the assertion of the *priority of consciousness*. Since this assertion constitutes the central thesis of idealism, and, as such, will occupy us during the next three chapters, a brief mention of it must suffice here.

In his book on Hume, Huxley writes as follows: "If the materialist affirms that the universe and all its phenomena are resolvable into matter and motion, Berkeley replies, True; but what you call matter and motion are known to us only as forms of consciousness; their being is to be conceived or known; and the existence of a state of consciousness, apart from a thinking mind, is a contradiction in terms. I conceive that this reasoning is irrefragable. And therefore, if I were obliged to choose between absolute materialism and absolute idealism, I should feel compelled to accept the latter alternative."[1] Huxley's acceptance of this argument is very significant. For in the great controversies of the last century, he has been one of the most distinguished protagonists of science. Despite his scientific affiliations and habits of mind, he was prevented from being an idealist only because he was an agnostic. The "reasoning" which constitutes the chief support of idealism he regarded as "irrefragable" — in common with the majority of the philosophers of his own and the present generation.

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[1] T. H. Huxley: *Hume*, p. 279.

Science, it is argued, abstracts things from their relation to knowledge. Concretely, everything is 'object' for a subject; something perceived, thought, or willed. This is supposed to become apparent at the moment when one becomes reflective or self-conscious—at the moment when one recognizes the central place of that 'I' which is naïvely overlooked, or, in the case of science, deliberately omitted. The *real nature* of things is grasped only when things are taken in this context. Viewed in this light, the world of science loses its self-sufficiency. It is, to be sure, internally systematic and consistent. But we are now to recognize that it is literally the world *of science;* formed to suit the purpose of scientific thought, and expressing, in the last analysis, the capacities and motives of knowledge. So it is to knowledge itself — to sense, thought, or purpose, that one must look for the root and stem of reality.

The critical examination of idealism must be reserved until we shall have become more fully acquainted with its grounds. But it is important to point out the essential agreement between idealism and the motive or standpoint of religion. We have already seen that while science, on the one hand, seeks to eliminate the personal equation, and to banish from mind the hopes and fears that are at stake, religion, on the other hand, makes the application and draws the moral.[1] Religion, in other words, is essentially a judgment of the bearing of reality on life. Now idealism asserts that reality is grounded in life, and ultimately controlled in its interests. Idealism not only construes things in their bearing on life, as religion does; but affirms that such a construction of things affords the only true insight into their nature. It not only adopts the method of religion, but affirms the priority of that method over the method of detachment and self-elimination adopted by science. Thus idealism comes to be identified with the institution of religion; and to be recognized as its champion against naturalism.

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[1] See above, pp. 28–29.

But this alignment of intellectual forces is confusing and misleading. In the first place, idealism, as a special theory, acquires unmerited prestige through its alliance with religion—which is a universal human interest. The validity which attaches to the interest and the institution in which it finds expression, is transferred to the theory. For the religious method has its incontrovertible rights. Reality *does* have a bearing on life, and it is necessary that reality should be so construed. But it does not follow that such a construction should, as the idealist would have us believe, take precedence of all other constructions. It may be that while reality affects life, it does so only accidentally; for philosophy to overlook this possibility, by employing the religious method exclusively, would be sheer bias. To this bias idealism is peculiarly liable.

In the second place, the association of idealism with the religious motive tends, as we have seen, to encourage the belief that philosophy is the same as religion. Idealism has not hesitated to identify the standpoint of philosophy in general with its own special bio-centric doctrine. But this is to exclude *ab initio* a philosophy which shall survey the totality of things dispassionately.[1] It is to beg the question of the place of life in reality at large, and thus commit philosophy with reference to a question which it should treat in a spirit of free and critical inquiry.

The central thesis of idealism, to the effect that consciousness, especially in the form of cognition, is the creative and sustaining principle in things, thus obtains a certain adventitious support from prevailing ideas concerning the relations of science, religion, and philosophy. It has also the support of certain dialectical arguments, which we shall presently examine. The outcome of that examination cannot fairly be anticipated here. But we shall find, I believe, that the arguments for idealism fail; and if so, the critique of science on the ground of the priority of consciousness is invalid.

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[1] See above, pp. 29–30, 40–41.

Science as a Limited Body of Truth

§ 12. Are we then to conclude that science has no bounds, and that the claims of an optimistic religion must therefore be abandoned? There remains a very simple alternative. Without prejudice to the truth of science or to the validity of its methods, without disparagement of the reality of physical nature, or the reduction of it to dependence on consciousness, it is still open to us to conclude that *science is not all of truth*, nor *physical nature all of being*. That which distinguishes such a critique of science is its recognition of science and nature, *as they stand*. They are not partially true or real; they are simply parts of truth and reality. And the other parts, while they do not undo or transmute the fact, may nevertheless put a wholly new face on the total situation. They disprove every claim to the *exclusive* truth of science; and provide a balance that may justify religion.

The ground on which such a critique of science stands has already been stated.[1] Analysis shows that physical science presupposes logic and mathematics; or, that physical reality is complex, and decomposable into more simple terms and relations. Physical science has to do, furthermore, with *certain features* of physical reality. It describes the quantitative constancies exhibited by physical change. And there are other features exhibited even by bodies; such, for example, as their control, in the case of living bodies, by desire and will. Thus, being is neither physical in substance nor is it exclusively mechanical in behavior.

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[1] See above, pp. 82–84. I shall resume this argument, and amplify its religious applications, in the final chapter.

Logic is prior to physics, in the sense that it has to do with more elementary forms of being; and ethics is at least correlative with physics, since what it describes is as truly found in the world as that which physics describes. And logic and ethics, taken together with other equally unimpeachable branches of philosophy, not only disprove the generalizations of naturalism, but afford a basis for religious belief.

It cannot, I think, be denied that naturalism has gained rather than lost by the usual tactics of its adversaries. It has been put in the position of being the more desirable alternative. As between naturalism and the traditional supernaturalism, no one would now hesitate to choose. And the polemic of idealism and pragmatism has similarly enhanced the credit of the very object of their attack. The charge of failure, the attempt to make capital out of the fallibility of science, has reacted upon its authors. The attacks upon the method of science have tended to create the supposition that the only alternative to naturalism is inexactness or unreason. The assertion of the unreality of space and time has not only failed to carry conviction, but has given rise to the more effective counter-charge of agnosticism and mysticism. And the attempt to disprove naturalism by claiming the universal priority of consciousness, has driven into the camp of naturalism many who shrink from the paradoxes of subjectivism. As the only alternative to supernaturalism, obscurantism, irrationalism, agnosticism, mysticism, and subjectivism, — naturalism has acquired a place of intellectual distinction which it does not in fact merit. The greater the opportunity, then, for a critique of science that shall do it strict justice; a critique that shall neither, on the one hand, concede the extravagant claims which naturalism makes in its behalf, nor, on the other hand, through the extravagance of its counter-claims, produce a reaction in its favor.

PART III

IDEALISM

CHAPTER VI

THE CARDINAL PRINCIPLE OF IDEALISM[1]

The General Meaning of Modern Idealism

§ 1. "The constant presupposition is, that a spiritual life which is a unified whole is at work in the depths of our soul." These words, written by Rudolph Eucken,[2] admirably express the *message* of idealism to modern times. Idealism is a form of spiritualism in which man, the finite individual, is regarded as a microcosmic representation of God, the Absolute Individual. Man's spiritual nature is a revelation of the *principle* of reality, and his ideals an intimation of the *perfect* and *eternal* reality. So that, but for his limitations, man would be God; and taken together with the balance of spiritual life, which compensates for these limitations, he *is* God.

But a characterization of idealism in terms so general as these, while it helps to define its place among religious and ethical motives, throws little light upon its technical philosophical meaning. To understand this it is necessary to examine its method and proofs. And we then discover that idealism rests fundamentally upon a theory of *knowledge*. The supremacy of spirit is argued from the theory of the priority of the knowing consciousness itself, over all with which it has to do. All things, it is contended, are primarily 'objects'; and to be object means necessarily to be 'for' something, to be in some sense the expression or creation of a 'subject.' The so-called 'external world' being in this manner reduced to knowledge, and knowledge being construed as spiritual, the supremacy of spirit is established. This is the reply of idealism to naturalism; and the justification which idealism affords to the religious belief that the world at large is governed in the interest of goodness.

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[1] Reprinted, with additions and alterations, from an article published in *Mind*, N. S., Vol. XIX, 1910.

[2] *The Life of the Spirit*, trans. by F. L. Pogson, p. 100.

The assertion of *the priority of the cognitive consciousness*, the assertion that *being is dependent on the knowing of it*, may, then, fairly be regarded as the cardinal principle of idealism. Only in the light of this principle can either the applications of idealism, or its own inner dialectical movement, be comprehended. I shall attempt in the present chapter to throw this principle into bold relief, by examining its origin, and formulating its fundamental proofs.

Platonic Idealism, or Teleological Rationalism

§ 2. Modern idealism, defined in the light of this principle, may be clearly distinguished from ancient idealism, or Platonism. Platonism is primarily the culmination of a tendency which manifested itself among all the pre-Socratics: a tendency of which the central motive was the assertion of the superiority of systematic or well-grounded knowledge to mere opinion. Thus Parmenides distinguished between "the unshaken heart of persuasive truth," and "the opinions of mortals in which is no true belief at all." Heraclitus remarked that the truth differed from opinion in being one and universal. "Though wisdom is common, yet the many live as if they had a wisdom of their own"; just as "the waking have one and the same world, but the sleeping turn aside each into a world of his own." [1]

Similarly with Plato, philosophy is primarily a means of escape from the relativity and conflict of opinion. The philosopher is "he who has magnificence of mind and is the spectator of all time and all existence"; who "will not rest in the multiplicity of individuals which is an appearance only, but will go on — the keen edge will not be blunted, neither the force of his desire abate until he have attained the knowledge of the true nature of every essence by a kindred power in the soul." True knowledge is marked by the kind of object which it discovers or seeks, "the absolute, eternal, and immutable," or "the things themselves," which, like the absolute square and the absolute diameter of mathematics, "can only be seen with the eye of the mind." And this insistence on the objectivity and permanence of truth is united with the speculative interest in completeness of truth. The knowledge of the philosopher will be not only unerring in point of certainty, but also unlimited in point of sufficiency and generality. Thus Plato represents also that philosophical tendency which has come latterly to be termed 'absolutism.'[1]

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[1] Burnet's *Early Greek Philosophy*, pp. 184, 140.

So far, in this summary of Plato, no provision has been made for the moral element. Plato's 'absolute' is defined as *the good*, and in the order of the sciences, ethics is elevated even above mathematics. "The excellence or beauty or truth of every structure, animate or inanimate, and of every action of man, is relative to the use for which nature or the artist has intended them."[2] In other words, for Plato *the teleological categories are fundamental*. And this motive doubtless tended to contradict his rationalism, and to create a certain affinity between him and those very sophists who were his dearest foes. The fact remains, however, that so far as method was concerned, ancient idealism was opposed, not to physical or mathematical science, but to the laxity of common sense.[3] This is proved by Plato's high esteem for mathematics as a means of intellectual discipline, through which the philosopher might be emancipated from personal bias and the evanescent chaos of immediate experience, and brought to apprehend definite conceptions and fixed principles.

§ 3. This rationalistic motive — critical, scientific, and speculative, which dominated constructive philosophy among the ancients, found a more complete expression many centuries later in Spinoza. But in Spinoza it is so far freed from all connexion with teleology as to provoke a wholly different alignment of forces. In the famous Appendix to Part I of the *Ethics*, it is argued that an explanation of nature in terms of final causes is necessarily anthropomorphic. Man is virtually attempting to account for the absolute origin of things in terms of that value which they have for *him*. He assigns as reasons for the being of things those reasons which would have moved *him* to create them. And where he can find no such reason he simply imputes one to God's inscrutable wisdom. "Such a doctrine," says Spinoza, "might well have sufficed to conceal the truth from the human race for all eternity, if mathematics had not furnished another standard of verity in considering solely the essence and properties of figures without regard to their final causes."[1] It will be observed that Spinoza prizes mathematics, not only for its exactness, but also for its dispassionateness, for that very character that led Plato to subordinate it to ethics. The philosopher of Spinoza is not the guardian of the State, representing the good of the whole rather than the good of any part, or even the lover of the absolute good, but the witness of those inexorable necessities which make no allowance for human ideals.

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[1] Cf. below, Chapter VIII, especially pp. 167, 169–172.

[2] Plato's *Republic*, Jowett's translation, 479, 486, 490, 510, 601.

[3] This was largely due to the fact that the physical and mathematical sciences themselves were not wholly free from teleology. The mechanical ideal of science was not yet developed. Cf. above, p. 31.

Rationalism Purged of Teleology by Spinoza

Thus in the rationalism of Spinoza the teleological principle, derived through Plato and Aristotle from the humanism of the Socratic age, and reinforced by the Scriptural account of the creation and of God's dealings with man, is replaced by the principle of *mechanism*. Science has now become identified in men's minds with the quantitative laws of motion. The Copernican revolution had further emphasized the meaning of the mechanical theory, and brought out its essentially de-anthropomorphic character, by removing the Earth from the centre of the stellar system, and reducing man's historical career to a peripheral and incidental feature of the cosmos.[1] Man was now of small account in that world which he had once been led to believe was contrived for his especial comfort and salvation. If the religious attitude was to be maintained with such a philosophical background, only two possibilities seemed to remain. Either, as in the case of Spinoza himself, the religious consciousness must be reduced to the reason's approval of truth; or religion as a whole must be conceived with Hobbes[2] as a secular institution, used to pacify disorderly men, and sharing the pettiness which under the mechanical philosophy attaches to all human affairs. But religion of the former type must be as rare as the spirit of renunciation and the capacity for intellectual mysticism; while religion of the latter type is a mere convention imposed by cynical enlightenment upon servile ignorance. Hence, not without reason, Spinoza and Hobbes were singled out and anathematized as the great prophets of irreligion.

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[1] Elwes's translation, Vol. II, p. 77. The *Ethics* was first published in 1677.

Spinoza and Hobbes do not, it is true, adequately represent the rationalism of the seventeenth and eighteenth centuries. It was on the whole characteristic of these centuries to believe that religion, even Christian orthodoxy, could be established by strictly rational means.[3] But Spinoza and Hobbes represent the rationalistic spirit of this age in its freest and purest expression, and their philosophies typify its logical trend. To keep one's eye single to things as they are, to yield one's mind only to facts and necessities, seemed to lead in the end to the belittlement of man and the disallowance of his spiritual claims.

The Idealistic Revolution

§ 4. We are now prepared to understand the service which modern idealism offered to religious belief. True religion required to be defended, not, as in the days of Socrates and Plato, against the prejudices and blindness of unthinking men, *but against the claim of science to have alienated the world from man.* Faith and revelation had been left unsupported in their demand that the world should be subordinated to spirit. That nature which religion had conceived to be the handiwork of God, or the stage-setting of the moral drama, or at most merely the principle of negation in the spiritual life, threatened to swallow up both man and God. A new philosophy must redeem nature from mechanism and restore its spiritual centre. It must not be supposed that this was the conscious aim of the idealists and their forerunners, or that the tendency was not in large part due to purely theoretical motives. But it is this that accounts for the great human importance of idealism, for its stimulating power and widely diffused influence. And it is in this sense that idealism is revolutionary. Kant, for example, compared his theory of knowledge with the Copernican revolution in astronomy. He proposed to assume that "the objects must conform to our mode of cognition" rather than that "our knowledge must conform to the objects," just as Copernicus, "not being able to get on in the explanation of the movements of the heavenly bodies, as long as he assumed that all the stars turned round the spectator, tried, whether he could not succeed better, by assuming the spectator to be turning round, and the stars to be at rest." [1]

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[1] Cf. above, pp. 13–15.

[2] Cf. his *Leviathan* (1651), Ch. XII.

[3] Cf. above, pp. 32–34.

But Kant did not point out the fact, nor has its importance ever been sufficiently recognized, that the idealistic revolution was virtually a *counter-revolution*, through which the spectator again became the centre of the system. Nor did this counter-revolution either begin or end with Kant. It is a movement of epochal proportions, supported by a wide diversity of thinkers, and dominating philosophy from the time of Berkeley down to the present day. Its central motive is the restoration of the supremacy of spirit. Its distinguishing characteristic as a philosophy of religion is its subordination of nature to God by means of a preliminary reduction of nature to knowledge. Science is to be allowed a free hand in nature; and having annexed nature, its title is to be transferred to mind. That very mechanical cosmos which had served to belittle man, is now made to glorify him through being conceived as the fruit of intelligence. God, the discarded hypothesis of science, is enthroned again as the master-knower of whom science itself is only the imperfect instrument.

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[1] *Critique of Pure Reason* (1781), Max Müller's translation, second edition, p. 693.

Thus, while the burden of idealism is a religious interpretation of nature, its cardinal principle is a theory of knowledge. For the purposes of technical philosophy it consists in a single proposition, to the effect that knowledge is an originating or creative process. Idealism's claims can be substantiated only provided it is true that *to know is to generate the reality known.* It must be proved that the being and nature of things are conditioned by their being known. In what follows, the attempt will be made, amidst the confusing motives which attend the history of idealism, to keep this cardinal principle constantly in view, and to sift and test the evidence with which it has been supported. And first, let us consider the manner in which Descartes and Locke, the forerunners of idealism, prepared the ground for Berkeley, its founder.

The Beginnings of Modern Idealism. The Dualistic Version of Knowledge

§ 5. The strategy of idealism depends on the adoption of a certain initial standpoint.[1] The world must be viewed under the form of knowledge. Although the precise significance of the fact cannot yet be made clear, it *is* a fact that everything that can be mentioned, such as the sun, gold, or Napoleon I, can be classed as an element of knowledge, or *idea.* This generalization does, it is true, require a qualification, the importance of which will shortly appear. Elements of knowledge, or ideas, imply a knower, which is not itself an idea, but which confers the character of idea on what it possesses. With this amendment, we may say that it is possible to regard the world of all mentionable things, even the Copernican plurality of worlds with their inflexible mechanical necessities, as comprehended under the knower and his ideas.

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[1] The dialectical importance of this starting-point will appear later. Cf. below, pp. 127–128.

Descartes[1] adopted this standpoint only provisionally, but the difficulty he met in extricating himself from it demonstrated its dialectical possibilities. When you record the knower and his ideas, or all knowers and their ideas, what is there left to account for? Descartes, of course, thought that there were at least two things still to account for, namely, God and nature. If asked whether these too were not ideas, he would have replied, not *merely* ideas — for they exist also in their own right. Nevertheless, from the Cartesian standpoint, God and nature are *primarily* ideas, that being the most certain thing about them. That there are such ideas is indubitable; that they are more than ideas remains somehow to be proved from what is known of them as ideas. The existence of God must be argued from the idea of God, and the existence of nature from the idea of nature.

The characteristic difference between Descartes and Locke lies in the fact that the former seeks to establish existence (as something other than the knower and his ideas) first in the case of God, while the latter seeks to establish it first in the case of nature. Let us consider the procedure of Descartes. He believes that he escapes from the circle of the knower and his ideas, through the peculiar character of the idea of God. He here employs the traditional 'ontological' proof, according to which the idea of an infinite and perfect being implies the existence of its object; and further argues that the idea of God possesses so high a degree of meaning as to require a being of like degree to account for it. Once the existence of God was established, and the circle broken, Descartes thought it safe to infer that other "clear and distinct" ideas, such as the ideas of nature, were also representative of existence.

Let us turn to the case of Locke. Nominally, he follows

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[1] Cf. his *Discourse on Method* (1637), and *Meditations* (1640), *passim*.

Descartes, and proves God before he proves nature. But logically he follows just the reverse order. Albeit with a certain becoming hesitation, he sets aside the ontological proof of God, and prefers those proofs that carried more weight with Englishmen and deists of the eighteenth century.[1] God's existence is proved from the necessity of an eternal and intelligent first cause of nature. The problem of existence must, then, be first solved with reference to nature. And here Locke's distrust of intellectualism leads him to define a new criterion. The ideas, he asserted, that are most significant of existence, are not those that are most clear and distinct, or most full of meaning, but those which are directly imprinted on the mind by an *external cause.* Existence is to be inferred, not from the import of ideas, but from the circumstances of their origin. It is not a question of proving the trustworthiness or representative validity of illuminating ideas; but of proving the extra-mental source of vivid and forceful ideas, that are beyond the mind's control. The unique case of such ideas is the sense-impression.[2]

Owing to this difference of procedure between Descartes and Locke, there came to prevail two notions of the relation between existing nature and the idea of nature. According to the Cartesian procedure, existent nature is essentially that which *corresponds* to the idea of nature. According to the empirical procedure of Locke, on the other hand, existent nature is essentially the *cause* of the idea of nature. In the first case existent nature must resemble the idea, and the real difficulty is to distinguish it therefrom. In the second case existent nature need not resemble the idea, and the real difficulty is to give it any real character or meaning at all. We are now prepared to understand the form which idealism first assumed in the writings of Berkeley.

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[1] Cf. Locke's *Essay Concerning Human Understanding* (1690), Bk. iv. Ch. X, §7.

[2] Cf. *op. cit.*, Bk. iv, Ch. XI, § 1. "No particular man can know the existence of any other being, but only when, by actual operating upon him, it makes itself perceived by him."

Berkeley's Refutation of Dualism

§ 6. Berkeley, like Descartes and Locke, begins with the assumption of the knower and his ideas, and feels the difficulty of establishing the existence of anything else. But Berkeley parts company with his predecessors, and with common-sense, in concluding that the difficulty is insuperable, and the attempt to overcome it gratuitous. He asserts, in short, that all existence may adequately be comprehended under the knower and his ideas; and in this assertion modern idealism first sees the light.[1]

With Berkeley, as with Locke, the question primarily concerns nature. Is there an existent nature over and above the idea of nature? The answer may be formulated as a dilemma. If, as Descartes would have it, existent nature agrees with the ideas of nature, then what is the difference? But if, as Locke suggests, existent nature does not agree with the ideas of nature, then what is it, and how can it be proved? Furthermore, why must a thing be other than idea in order to exist? In the case of nature, Berkeley asserts, it would appear that *esse est percipi*.

Berkeley's argument is too well-known to require detailed restatement, but it is highly important to discover just what it proves. That Berkeley believed that he had established idealism is beyond question; his whole religious philosophy depended on a reduction of nature to spirit. But it is certainly true of much of Berkeley's argument, that while it serves to refute the dualism of Descartes and Locke, it nevertheless does not establish idealism. There is a halting-place short of that theory, where the issue is altered, and where new alternatives arise and diverge. Consistently with our purpose of disentangling the cardinal principle of idealism, and of isolating the evidence offered in support of it, we must therefore separate Berkeley the idealist from another Berkeley, who is simply the vanquisher of dualism.

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[1] Berkeley's *Principles of Human Knowledge* was published in 1710. Malebranche, Norris, and Collier should be credited with original contributions to this doctrine, but Berkeley gave it its prominence and classic form.

The dualistic position is thus summarized by Hylas, the *advocatus diaboli* in Berkeley's well-known dialogue: "To speak the truth, Philonous, I think there are two kinds of objects: — the one perceived immediately, which are likewise called *ideas;* the other are real things or external objects, perceived by the mediation of ideas, which are their images and representations. Now, I own ideas do not exist without the mind; but the latter sort of objects do."[1] In attacking this position Berkeley first shows that whatever answers to the name of a natural object, such, for example, as "tulip," is perceived immediately, and hence is idea. Its color is seen, its shape and size both seen and felt, its odor smelt, and so with every quality or element that is attributed to it. What, then, is the "real" or "external" tulip "without the mind?" And what ground is there for affirming it? There are, Berkeley believes, only two conceivable alternatives, both of which are untenable.

In the first place, one may contend, after the manner of Descartes, that an idea, if it be clear and distinct, is a trustworthy likeness of something that exists "without the mind." But how can a thing that is in its substance or essence non-mental be like a thing that is essentially mental? Surely a copy which must necessarily miss the essence of the thing copied is no copy at all. Does it mean anything to speak of absolutely invisible color, or inaudible sound? In general, does it mean anything to speak of an object that is like ideas in all particular qualities and attributes, and yet possesses a fundamentally and radically different nature? By means of these and similar considerations, Berkeley shows that a non-mental world which corresponds with the mental world but never coincides with it, is both arbitrary and meaningless. And is it not also gratuitous?

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[1] *Dialogue between Hylas and Philonous* (1713), Fraser's edition, Vol. I, p. 414.

This raises the question in the form in which it presents itself to Locke.

For, in the second place, it may be contended that certain ideas, sensations, namely, have an extra-mental cause. They are forced upon the mind, and are not of its own making. In this Berkeley is empiricist enough to agree with Locke. But what *is* the cause? If it be conceived as matter, then it reduces itself to an unknown substratum, because everything that is known of matter is, as we have seen, contained within ideas. And why should a cause, to which none of the properties of matter can be attributed, be regarded as material at all? Since here it is not required that the extra-mental reality shall be like the ideas, but only that it shall be their cause, why should it not be conceived after the analogy of the only cause of ideas with which we are directly acquainted, namely, will or spirit? In this case, matter or physical nature would simply coincide with perceptions caused by God. There would be no matter behind appearance, no duplication of known matter through the assumption of a likeness or prototype of it, and no discrediting of knowledge through the assumption of an unknown and unknowable essence.

Epistemological Monism

§ 7. Now without doubt Berkeley meant to assert that whatever is content of ideas, such as matter in the above sense, is *necessarily* or *essentially* ideal; its *esse* is *percipi*. But this does not follow from the argument as thus far outlined. For it is entirely possible that the real tulip should be, as Berkeley argues, identical, element for element, with the idea of tulip, and yet not require to be perceived in order to be. It is only necessary to conceive of idea as an *office*, or *relationship*, instead of as a kind of substance.[1] It is then possible to suppose that a thing may *occupy* that office or relationship, and thus *assume* the status of idea, without being *identified* with it.

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[1] The view adopted by pragmatism. Cf. below, pp. 200–203.

The principle involved is a very common one, and never disputed in its more familiar applications. Thus when a citizen of the United States becomes President, the citizen and President are identical. There is no 'presidential' entity substituted for the citizen — no correspondence or representation. The simple fact is that a citizen, without forfeiting his citizenship, may assume the status of President. But no one would think of contending that therefore being President is a condition of citizenship, or that citizens are essentially presidential, or that there can be no citizens that are not presidents. Similarly, tulips may be known, and when known called 'ideas of tulips.' There is, as Berkeley justly contends, no substitution or representation, no duplication or mystification. The tulip simply assumes a certain status, definable by the special relationship *percipi*, and involving no forfeiture of its nature or identity. But this does not at all imply that whatever assumes the status of idea, *must* be idea in order to be at all, or that there are no things that are not ideas. The confusion doubtless arose from a convention to the effect that mind and nature are different 'substances,' or different domains, lying wholly outside of one another, and therefore mutually exclusive in their content.[1] It would follow from such a supposition that whatever belongs to mind or to nature belongs to it absolutely and irrevocably. But once this supposition is abandoned, there is nothing whatsoever to prevent a thing's belonging *both* to nature and to mind; in which case it is impossible to argue that because a thing belongs to mind it therefore owes its existence to the fact.

Now the doctrine which results from the rejection of the dualism between idea and existence, but which stops short of idealism, deserves independent recognition and a name that shall distinguish it. For it is accepted by contemporary thinkers of opposing schools and can therefore be eliminated from most present-day controversy. The phrase 'epistemological monism' has the virtue of suggesting that the doctrine in question is essentially a doctrine about knowledge, and not about being or existence, and also of suggesting that the doctrine arose historically as a refutation of dualism.[1] Epistemological monism means that when things are known they are identical, element for element, with the idea, or content of the knowing state. According to this view, instead of there being a fundamental dual division of the world into ideas and things, there is only the class of things; ideas being the sub-class of those things that happen to be known. That which is commonly called the 'object' of knowledge merges, according to this view, with the idea, or is the whole thing of which the idea is a part. Thus when one perceives the tulip, the idea of the tulip and the real tulip coincide, element for element; they are one in color, shape, size, distance, etc. Or, if one so desires, one may reserve the name of 'real tulip' for the whole of the tulip, as distinguished from whatever portion of it is actually embraced within the idea. But in this doctrine nothing whatsoever is asserted or implied of the tulip, except as respects this particular question. Whether it be essential or accidental to the tulip that it should be perceived, and thus become an idea — whether all tulips are ideas — is a wholly different question which must be decided on different grounds. And it is an answer to this second question which constitutes the cardinal principle of idealism. We may now turn to that principle as it is formulated and defended in the philosophy of Berkeley.

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[1] Descartes is mainly responsible for the prominence of this notion in modern philosophy; but it probably arose mainly from the emphasis given to "the inner life" by introspective Christianity.

Berkeley's Proofs of Idealism. 'Definition by Initial Predication'

§ 8. Berkeley only infrequently isolates his strictly idealistic arguments, but the passages in which he does so are of the greatest historical importance. In the dialogue to which we have already referred, we read: — "That the colors are really in the tulip which I see is manifest. Neither can it be denied that this tulip may exist independent of your mind or mine; but, *that any immediate objects of the senses — that is, any idea, or combination of ideas — should exist in an unthinking substance, or exterior to all minds, is in itself an evident contradiction.*"[1]

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[1] This doctrine is discussed more fully below, p. 308 ff.

Now we shall understand Berkeley's meaning if we can apprehend this "evident contradiction." "The tulip which I see" is idea; and it belongs to the essential character of ideas that they should be in mind; hence it is contradictory to assert that "the tulip which I see" is exterior to mind. If all redundancy and quivocation is eliminated, this amounts to the assertion that a tulip *when* seen, or defined as seen, is not a tulip unseen. But what Berkeley sought to establish was virtually the proposition that the tulip which I see can never be unseen; and this does not follow. For it is not contradictory to assert that the tulip which I see today was unseen yesterday, or that many tulips are "born to blush unseen" forever. Berkeley's error lies in his inferring that because the tulip *is* seen, therefore its being seen is its essential and exclusive status.

Berkeley's reasoning at this point is so characteristic of idealistic reasoning in general as to make it worth our while to generalize it. It does not occur to him, apparently, that a natural body, like a tulip, can belong both to the order of ideas and *also* to another and independent order. In other words, he assumes that an identical element can belong to only one complex. But, as a matter of fact, such is not the case. The letter *a*, for example, is the second letter of the word 'man,' and also the fifth letter of the word 'mortal'; and it enters into innumerably many other words as well. It possesses, in other words, a *multiple* and not an *exclusive* particularity. And the false assumption to the contrary gives rise to a specious argument. For having found an entity, like the tulip, in the mental context, where it is named 'idea,' and having assumed that it can belong to only one context, Berkeley thereupon *defines* it as idea, and concludes that it is such exclusively. But this is as though, having found the letter *a* in the word 'man,' we should propose to define it as 'the second letter in the word man' and so to preclude its occurring in any other word.

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[1] *Op. cit.*, Fraser's edition, Vol. I, p. 406. (The italics are mine.)

This specious argument, involving the assumption of 'exclusive particularity,' may be conveniently described as 'definition by initial predication.'[1] It consists in regarding some early, familiar, or otherwise accidental characterization of a thing as definitive. I may, for example, owing to the accident of residence, first learn of Columbus through the fact that the Columbia River was named for him; but it does not follow that 'the man the Columbia River was named for' may be substituted for 'Columbus' in historical science, for the obvious but sufficient reason that this characterization is not adequate. Similarly, Columbus is 'the man I am now thinking of' — the fact is not to be impeached; but to treat him as such in all subsequent discourse would be to assume that his being thought of by me was the most distinctive thing about him; which is, of course, contrary to fact. Now idealists habitually construe things as 'thought of,' and accordingly name them 'objects of thought,' or 'ideas.' But while, as we have seen, it is proper to say that it is the thing itself, and not a duplicate or representation of it that *is* thought of, it does not follow that to be thought of, or otherwise known, is either necessary or important for things. And it is precisely this which idealism must prove if it is to justify itself. It must prove that to classify things as ideas, objects of knowledge, or experiences, is *the most fundamental disposition that can be made of them.* To classify them thus at the outset, and then to *prefer* this classification to the many other possible ones, is simply to assume the very thesis under discussion.

§ 9. Berkeley's argument assumes a different form in the following passage taken from the *Principles of Human Knowledge:* —

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[1] Cf. also below, pp. 133, 158–162.

The Argument from 'the Ego-centric Predicament'

"But, say you, surely there is nothing easier than for me to imagine trees, for instance, in a park, or books existing in a closet, and nobody by to perceive them. I answer, you may so, there is no difficulty in it. But what is all this, I beseech you, more than framing in your mind certain ideas which you can call *books* and *trees*, and at the same time omitting to frame the idea of any one that may perceive them? But do not you yourself perceive or think of them all the while? This therefore is nothing to the purpose; it only shows you have the power of imagining, or forming ideas in your mind; but it does not show that you can conceive it possible the objects of your thought may exist without the mind." [1]

In other words, one cannot conceive things to exist apart from consciousness, because to conceive is *ipso facto* to bring within consciousness. It is to this argument that Berkeley appeals in the last resort, and his procedure is here again so typical as to deserve to be ranked with 'definition by initial predication' as one of the fundamental arguments for idealism.

The argument calls attention to a situation that undoubtedly exists, and that is one of the most important original discoveries that philosophy has made. *No thinker to whom one may appeal is able to mention a thing that is not idea*, for the obvious and simple reason that *in mentioning it he makes it an idea.* No one can report on the nature of things without being on hand himself. It follows that whatever thing he reports does as a matter of fact stand in relation to him, as his idea, object of knowledge, or experience. In order to avoid making inferences unawares, it is necessary to have a name for this situation just as it stands. It will be convenient to call it '*the ego-centric predicament*.' [2]

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[1] Fraser's edition, Vol. I, p. 269.

[2] I have formulated and criticised this argument more fully in an

This predicament arises from the attempt to discover whether the cognitive relationship is indispensable to the things which enter into it. In order to discover if possible exactly how a thing is modified by the cognitive relationship, I look for instances of things *out* of this relationship, in order that I may compare them with instances of things *in* this relationship. But I can find no such instances, because 'finding' is a variety of the very relationship that I am trying to eliminate. Hence I cannot make the comparison, nor get an answer to my original question by this means. But I cannot conclude that there are no such instances; indeed, I now know that *I should not be able to discover them if there were.*

Again, with a view to demonstrating the modification of things by the cognitive relationship, I examine the same thing before and after it has entered into this relationship with some knower other than myself. But in making the comparison, I institute this relationship with myself, and so am unable to free the thing *altogether* from such relationships.

Again, within my own field of consciousness, I may attempt to define and subtract the cognitive relationship, in order to deal exclusively with the residuum. But after subtracting the cognitive relationship, I must still 'deal with' the residuum; and 'dealing with' is a variety of the very relationship which I sought to banish.

Finally, just in so far as I do actually succeed in eliminating every cognitive relationship, I am unable to observe the result. Thus if I close my eyes, I cannot see what happens to the object; if I stop thinking, I cannot think what happens to it; and so with every mode of knowledge. In thus eliminating all knowledge, I do not experimentally eliminate the thing known, but only *the possibility of knowing whether that thing is eliminated or not.*

This, then, is 'the ego-centric predicament.' But

article entitled "The Ego-centric Predicament," *Jour. of Phil., Psych., and Sc. Methods*, Vol. VII, 1910, No. 1. A part of what follows is reprinted from that article. Cf. also below, pp. 133–134, 158.

what does it prove, and how does it serve the purpose of idealism? It should be evident that it proves nothing at all. It is simply a peculiar methodological difficulty. It does, it is true, contain the proposition that *every mentioned thing is an idea.* But this is virtually a redundant proposition to the effect that every mentioned thing is mentioned — to the effect that every idea, object of knowledge, or experience, is an idea, object of knowledge, or experience. And a redundant proposition is no proposition at all. The assertion that an idea is an idea conveys no knowledge even about ideas. But what the idealist requires is a proposition to the effect that *everything is an idea*, or that *only ideas exist.* And to derive this proposition directly from the redundancy just formulated, is simply to take advantage of the confusion of mind by which a redundancy is commonly attended.

It may be argued, however, that the ego-centric predicament is equivalent to an inductive proof of the proposition that all things are ideas. Every observed case of a thing is a case of a thing observed. Neglecting the redundancy, which is sufficient of itself to vitiate the assertion, we remark that the induction proceeds entirely by Mill's "method of agreement," which is invalid unless supported by "the method of difference," that is, the observation of negative cases. But the ego-centric predicament itself prevents the observation of negative cases. It is impossible to observe cases of unobserved things, even if there be any. In other words, there is a reason *connected with the conditions of observation* why only agreements should be observed. But where this is the case the method of agreement is worthless; and the use of it is a fallacy. Thus, I cannot conclude that English is the only intelligible form of speech simply because whomsoever I understand speaks English. On the contrary, my peculiar situation, as one acquainted only with a single language, is sufficient to discredit my results. If I should discover that I had been wearing blue glasses, I would at once discount the apparent blueness of everything that I had seen. And similarly, the general circumstance that in observing I am compelled to supply the very element whose real ubiquity or necessity I am attempting to discover, must itself be discounted or corrected, if I am to draw a true conclusion. In so far as the idealistic conclusion depends on that circumstance itself, it is fallacious.

The Cardinal Principle and the Berkeleyan Proofs in Contemporary Idealism

§ 10. A study of the later development of idealism will disclose the fact that it relies mainly, if not entirely, on the Berkeleyan proofs — 'definition by initial predication,' and 'argument from the egocentric predicament.' Despite the fact that present day idealism prefers to attribute its authorship to Kant, some idealists expressly credit Berkeley himself with having established the cardinal principle. "The truth is," says one writer, "that Berkeley gave the *coup de grace* to all forms of materialism, when he proved, or led the way to the proof, that matter (so-called physical reality) is a compound of qualities, and that every quality turns out to be an elemental form of consciousness, a way of being conscious." [1]

But it is more usual to find Berkeley's proofs restated, with slight variations to match the shade of the particular idealism which the author represents. For the cardinal principle lends itself to various interpretations. In its general form this principle asserts the priority of the cognitive consciousness; and it is therefore capable of as many diverse formulations as there are diverse conceptions of cognition. Thus there may be perceptual, rational, or volitional idealists, according as knowledge is held to consist essentially in perception, reason, or volition. And Berkeley's proofs are capable of corresponding formulations. With some of these diversities we shall deal in the chapter that follows.[2] Meanwhile it will throw further light on the meaning of Berkeley's proofs, and illustrate their wider significance, if we have set before us a single contemporary instance of each.

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[1] M. W. Calkins: *The Persistent Problems of Philosophy*, p. 400; cf. pp. 118–132.

[2] Cf. especially, pp. 158–162.

The use of 'definition by initial predication' appears, for example, in the common habit among idealists of adopting what is called *the standpoint of experience.* This standpoint being once adopted, and the meaning of experience formulated, idealism needs no further proof. Thus Professor Baillie writes: "We must start, in other words, from the whole of experience as such. . . . Now we take experience as a whole when we look upon the subject-mind, in which alone experience exists, as the centre to which all forms of experience refer and round which they gather. . . . Experience always implies a relation between two distinct elements: the one is that for which something is, and the other the something which is presented. These are the so-called subject and object."[1] But nowhere does this author show why we should start with experience in this sense, or why having so started we should regard that particular aspect of things as essential and definitive.

When idealists do raise these last questions, they employ, as a rule, the argument from the 'ego-centric predicament.' We *cannot avoid* the standpoint of experience, if we are to have anything before us at all; or eliminate the relation to a thinking consciousness, if we are to think. "Find any piece of existence," says Mr. Bradley, "take up anything that anyone could possibly call a fact, . . . and then judge if it does not consist in sentient experience. . . . When the experiment is made strictly, I can myself conceive of nothing else than the experienced. Anything, in no sense felt or perceived, becomes to me quite unmeaning. And as I cannot try to think of it without realizing either that I am not thinking at all, or that I am thinking of it against my will as being experienced, I am driven to the conclusion that for me experience is the same as reality.

[1] J. B. Baillie: *Idealistic Construction of Experience*, pp. 105, 108.

. . . You cannot find fact unless in unity with sentience."[1] But all this proves no more than that *finding* is finding; no amount of reiteration or verbal alteration can ever make it prove what the idealist wants it to prove — namely, that *being* is finding, that in order to be or to be what they are, things *must* be found.

It is doubtless true that idealism has had a long and eventful history since Berkeley; and there are many who would maintain that idealism did not begin its history until after Berkeley. But to any one who refuses to permit the issue to be confused, it must be apparent that the theory with which Berkeley startled the world in 1710 is essentially the same as that which flourished in the nineteenth century in the form given it by Fichte and Hegel. It is essentially the same, in that the agreement is far more important than the difference. The two theories agree in asserting that the cognitive consciousness is the universal condition of being, or that *to be is to be either knower or known;* they differ in what they conceive to be the fundamental properties of consciousness and the nature of truth. But it is the principle in which they agree from which both theories derive their philosophy of religion, and to which both have owed their popular influence. And this principle obtains both its simplest statement and its original arguments in the writings of Berkeley.

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[1] F. H. Bradley: *Appearance and Reality*, pp. 145, 146.

CHAPTER VII

OBJECTIVE OR TRANSCENDENTAL IDEALISM

General Meaning of Post-Kantian Idealism

§ 1. The militant and profoundly influential idealism of contemporary thought traces its descent from Kant, and only indirectly, if at all, from Berkeley. The phrase 'objective idealism,' in the sense in which it is at present in vogue in English-speaking countries, is intended to suggest that Kantianism cures Berkeleyan idealism of a malignant 'subjectivism,' with which it is infected, and to which it must otherwise succumb. For to reduce external reality to the several percepts of the human mind, as Berkeley did, is virtually to reduce it to that transiency, relativity, and privacy of mere opinion, from which knowledge must perpetually seek to escape.

According to objective idealism, Berkeley's error lay, not in his reduction of external reality to mind; but in his failure to recognize that the mind here in question is not the human mind of psychology, but a *universal mind*, or *a subject of knowledge in general*, endowed with the principles of logic. The central conception of objective idealism, in other words, is the conception of a super-personal, or impersonal, logical consciousness. This consciousness conditions being; and its enactments are binding on the individual thinker, as his 'objective' reality.[1] Thus objective idealism does not propose to reject the cardinal principle of Berkeleyan idealism, but rather to correct and improve upon it. It is only when viewed in this light that its inner dialectic can be understood. In the account which follows, I shall consequently seek to discover not only whether objective idealism does actually succeed in avoiding the pitfall of 'subjectivism,' but also whether it in any way strengthens the case for idealism by reinforcing Berkeley's original proofs, or by adding new proofs of its own.

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[1] As is well known, Berkeley himself anticipated this theory in his conception of the divine mind. But that which to Berkeley was an afterthought, never satisfactorily reconciled with his first principles, becomes in objective idealism the central motive.

Kant's contribution to objective idealism consisted in his discovery of certain 'categories,' or forms of thought, which he held to be the universal prerequisites of knowledge. He employed the term 'transcendental' to indicate the peculiar status of these categories, and the metaphysics of his followers thus derives the name 'transcendental idealism,' or 'transcendentalism.'[1] As a rehabilitation of rationalism, this view was opposed to the whole empirical movement which had emanated from Locke and which dominated the thought of the eighteenth century. But it was opposed more particularly to the fatal consequences of empiricism as exhibited in the hopeless predicament of Hume. This writer was at the beginning, as he has remained ever since, the awful warning to all who would stray from the path of Kantian rectitude. We must, therefore, begin our review of Kantianism with a brief account of this unbeliever who perished for lack of the gospel.

The Sceptical Crisis in Hume

§ 2. Hume's sceptical predicament was the sequel to his criticism of Berkeley. He showed that although Berkeley had successfully vanquished the older dualism between ideas and material substance, he had at the same time given fresh emphasis to another dualism, that between ideas and *spiritual* substance. "Besides all that endless variety of ideas or objects of knowledge, there is likewise Something which knows or perceives them; and exercises divers operations, as willing, imagining, remembering, about them. This perceiving, active, being," says Berkeley, "is what I call *mind*, *spirit*, *soul*, or *myself*." But spirit is not strictly speaking an object of knowledge. "Such is the nature of Spirit, or that which acts, that it cannot be of itself perceived, but only by the effects which it produceth."[1] And the status thus assigned to spirit corresponds almost exactly to that possessed by matter in the traditional view which Berkeley had himself discredited; so that the same dilemma may be urged against it. Spirit, like matter, must either come within knowledge or fall outside it. If it comes within knowledge it coincides with some idea or group of ideas; if it falls outside of knowledge, as a mere "producer" of ideas, it is arbitrary and meaningless. Hume adopts the former alternative with reference to spirit, precisely as Berkeley had adopted it with reference to matter: with the result that both spirit and matter are reduced to one manifold of ideas.

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[1] I do not mean, of course, to imply that Kant himself is a metaphysician, or even that *all* of his followers are metaphysicians. It is possible to be a Kantian, and yet not be an idealist in the sense intended in the present chapter. Cf. below, pp. 144–148.

The question now arises as to the propriety of the term 'idea,' as applied to these common elements to which both spirit and matter have been reduced. If spirit be defined as a group of ideas, then it is clear that ideas themselves cannot be defined in terms of spirit. They become simply *elements* or *qualities*. Hume felt the force of this consideration, and it led him to the tentative supposition that perceptions can exist apart from the mind. Had he adopted and fortified this view, he would have been the founder of a new realism, instead of a link in the development of idealism. He rejected the view, however, summarily and unequivocally. He attributed his rejection of it to "those experiments which convince us that our perceptions are not possessed of any independent existence," such as the displacement of the field of vision by pressure on the eyeball. These and kindred phenomena, such as color-blindness, are cited to prove that "all our perceptions are dependent on our organs, and the disposition of our nerves and animal spirits."[1] But since Hume has led us to suppose that our bodies themselves along with the rest of physical nature are no more than perceptions, he cannot properly argue that perceptions in general are dependent on the body. If relativity is to be advanced as an argument for idealism, it must be, not a relativity of ideas to body, but of body to ideas. And this relativity must be proved, if it is to be proved at all, by Berkeleyan methods.

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[1] Berkeley: *Principles of Human Knowledge*, Fraser's edition, Vol. I, pp. 258, 272.

Hume was especially influenced, I think, by the error of 'exclusive particularity.' He agreed with Berkeley that the elements of physical nature are the same as those of mental states; and advanced beyond Berkeley in reaching the same conclusion concerning spiritual nature. He found, in short, that the traditional substances, material and spiritual, are made up from the same manifold of elements. But instead of recognizing their interchangeable character, *he named these elements*, following Berkeley, *after one of the rôles in which they appear.* Finding them in the succession of the individual's mental states, he identified them with this order, and regarded them as belonging to it essentially and exclusively. The result is Hume's radical phenomenalism, or psychologism. To be is to be a particular mental state; and a particular mental state has no being whatsoever, other than its *momentary presence.* To be perceived or thought, to occur in consciousness, is to come into being; and to lapse from consciousness is to cease to be. There can be no permanence, and no sameness, because each unit of existence belongs wholly and exclusively to the moment of its occurrence in consciousness. The world consists, in short, of the coexistence and succession of unique individuals which instantly arise and instantly perish.

Hume not improperly regarded this outcome as equivalent to scepticism. It is, he thinks, the only conclusion that can consistently be reached on strict theoretical grounds. Nevertheless it is impossible for the ordinary man, or even for the philosopher in his ordinary moods, to believe it. The difficulty, according to Hume, is essentially a practical one. In order to live, it is necessary to regard the environment as having sameness and permanence; it is necessary to assume that one may have dealings at different times with an identical object, and that the objects on which one acts persist in one's absence. Such suppositions concerning the external world provide the orientation which is necessary for action. But in Hume's opinion they cannot be justified theoretically. "Carelessness and inattention alone can afford us any remedy."[1]

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[1] Hume: *Treatise of Human Nature* (1739), Selby-Bigge's edition, pp. 207, 210–211. Cf. below, pp. 306–307.

Kant to the Rescue. The 'Categories' and 'Synthetic Unity'

§ 3. Kant agreed with Hume that the situation just described was practically intolerable, but added that it was theoretically intolerable as well. And it is not only contradicted by the whole body of existing science, but it is also *self*-contradictory. For the flux implies an order — at least a temporal successiveness — which cannot be contained within any merely momentary state. Furthermore, Hume's whole procedure implies that this general flux-character of things can be known by various knowers at various times; so that this, at least, must possess sameness and permanence. In other words, without order, sameness and permanence, *no knowledge whatever is possible* — not even knowledge enough to warrant scepticism.

Kant doubtless rendered a service to all subsequent thinkers in proving the necessity of the principles of order, sameness, and permanence. Any object or world whatsoever must possess, in some measure, the structure and determinateness which such 'categories' can alone supply. But *the status which Kant assigned to them*, is another and more doubtful matter.

Let us consider, first, the alternative which he neglected.

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[1] Hume: *op. cit.*, p. 218.

Avoiding the error of Hume, he might have declined to identify the elements of experience with the experience-manifold exclusively. Had he adopted this course, his deduction of the categories would have amounted to proving that the elements of experience *do* stand in other orders besides the order of their successive and transient appearance; and that there *are* principles of order, such as space, time, substance, and causality, which cannot be identified with any of the particular transient appearances that presuppose them. In this case, neither physical nature nor the categories would have been construed as in any sense mental.

But Kant did not adopt this course. With Hume and Berkeley, he regarded the terms of experience as essentially "phenomena" or "representations." "They form an object that is within us only, because a mere modification of our sensibility can never exist outside us." Then, recognizing that the merely psychological order of Hume presupposed a more fundamental physical order, he regarded this also as an order of phenomena or representations, and its principles as forms of consciousness. "The very idea that all these phenomena, and therefore all objects with which we have to deal, are altogether within me, or determinations of my own identical self, implies by itself the necessity of a permanent unity of them in one and the same apperception." The order, in other words, borrows a mental character from its terms. A unity of phenomena will be a unity of "apperception." The new order is not, it is true, mental in the psychological sense. But this leads not to the denial of its mental character altogether, but to the *new conception of a non-psychological or logical mind.*

A second reason for Kant's version of the categories is his theory that a priori or necessary knowledge can be possible only on the supposition that knowledge dictates to its objects.[1] "If the objects with which our knowledge has to deal were things by themselves, we could have no concepts a priori of them." To be able to know beyond the present experience, to be able to know universally, implies that knowledge shall be able to lay down the conditions which all experience shall fulfil. Logic, for example, can hold of all experiences whatsoever, only provided it be construed as determining what *can be experienced.* The categories thus appear as "the necessary conditions of a synthetical unity of the manifold of intuition in a possible experience."

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[1] For a criticism of this view, cf. below, p. 160.

But quite apart from these considerations, the quasi-mental status of Kant's categories could be accounted for by his adoption of the epistemological standpoint. He undertook "to determine the possibility, the principles, and the extent of all cognitions a priori." Then, when, in fulfilment of this task, he discovered the categories, he named them after their *rôle in cognition.* "I call all knowledge *transcendental,*" he says, "which is occupied not so much with objects, as with our manner of knowing objects, so far as this is meant to be possible a priori." The "transcendental deduction" of the categories introduces them as the indispensable condition of a priori knowledge. They are the forms of a transcendental synthesis or "unity of apperception," which is the supreme intellectual function.[1] Introduced to meet the exigencies of knowledge, the whole Kantian logic thus obtains at the outset a cognitive or mental status which it never loses, even among its most rigorously "logical" exponents.[2]

Kant is to be credited with proving that if any knowledge is to be possible, then physical, mathematical, and logical knowledge must be possible.[3] The knowledge of the momentary presence of a state, to which Hume had sought to reduce all knowledge, is not self-sufficient. It presupposes other knowledge; and all knowledge in the end presupposes logic. But Kant did more than to prove the validity and priority of logic. *He identified logic with the cognitive consciousness;* with the result that his proof of the priority of logic confirmed the Berkeleyan assertion of the priority of consciousness.

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[1] Kant: *Critique of Pure Reason*, Max Müller's trans., second edition, pp. 105–106, 129, 2 (note), 9 (note), 100.

[2] See below, p. 147.

[3] Cf. G. E. Moore: "The Nature of Judgment," *Mind*, N. S., Vol. VIII, 1899, pp. 190 sq.

Kant's Relations to Idealism

§ 4. It will be worth our while briefly to consider Kant's own version of his relations to idealism. He described his own position as "empirical realism" and "transcendental idealism," as opposed to "empirical idealism" and "transcendental realism." "Empirical idealism," which reduces experience to the psychological manifold, Kant rejects; because the series of internal states is itself definable only in relation to the more fundamental order of physical nature. Its time is measured by physical events, and its subjective sequence and concomitance is distinguishable only by contrast with the standard arrangements of physical law. In other words, "internal experience itself is possible, mediately only, and through external experience." This is "empirical realism." It leaves us, however, with a new order of experience, the so-called external experience. This is none the less "experience" for being prior to the psychological manifold. For "transcendental idealism," which is the sequel to this empirical realism, "matter is only a class of representations (intuition), which are called external, not as if they referred to objects external by themselves (transcendental realism), but because they refer perceptions to space in which everything is outside everything else, while space itself is inside us."

Thus Kant's empirical realism does not in the least conflict with his assertion that "all phenomena are representations only, not things by themselves." It is merely a subordinate phase of a "transcendental idealism," in which the psychological and physical orders alike are grounded on the laws or necessary conditions of a consciousness in general. Both alike are phenomenal *in respect of* *this universal consciousness*, precisely as in empirical or subjective idealism, the physical order is phenomenal in respect of the psychological consciousness.[1]

Kant, although he was the founder of a new idealism, was not himself an idealist, *in the metaphysical sense.* He defined the categories as conditions imposed on things by the knowing of them; but he asserted that reality was under no necessity of conforming to these conditions, *except in so far as known.* That a thing must be known in order to be, he expressly denied. But the promptness and apparent ease with which Kant's view was transformed into a metaphysical idealism, is proof of the instability of the situation as he left it. Having established the essentially formative and constitutive character of knowledge, nothing can be independent of knowledge except that which lies beyond even the possibility of knowledge. The forms of the cognitive consciousness underlie all that is or can be experienced. So that Kant's 'thing-in-itself,' like the material substratum which Berkeley had so effectually disposed of, is no more than a symbol of nescience.

The 'thing-in-itself' once eliminated, the cognitive consciousness enters into undisputed possession of the field. And in order to be equal to this metaphysical rôle, cognitive consciousness must be more liberally endowed than it had been by Kant. It is not enough that it should be endowed with the categories of physical science, for these do not form a self-sufficient world. The new idealism gives "constitutive" validity to that "ideal of the Unconditioned," to which Kant had attributed only a "regulative" validity. Thus enriched, the cognitive consciousness assumes the authorship and proprietorship of reality.

The new idealism thus restates the cardinal principle in a new form. Knowing is declared to be the ground of being; but knowing receives a new definition. It is no longer the receptivity of an individual perceiver, but the systematizing activity of a universal thinking. The new idealism lays claim to the title 'objective' for having rescued the object from the flux of the human individual's mental states, and given it permanence, identity, and orderly relations. But the object is thus rescued from the psychological subject, only to be appropriated by its deliverer, the transcendental subject. So that it is still dependent on subjectivity in some guise, and the most essential feature of the situation as Berkeley left it remains unaltered.

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[1] Kant: *op. cit.*, pp. 300–301, 780. Had I desired to exploit the subjectivistic strain in Kant, I could have dwelt upon his theory of the subjectivity of space and time. I have preferred to emphasize the element of subjectivity in those features of his philosophy, 'synthetic unity' and the 'categories,' which have been most emphasized by his followers.

Diverse Tendencies. 'Critical' Idealism

§ 5. The history of Kantian idealism is determined by a conflict of the several motives represented by its founders.[1] In Kant himself, idealism assumed a 'critical' form, opposed to the metaphysical form into which it was promptly converted by Fichte and Hegel. Fichte, again, developed an ethical or voluntaristic idealism, to which was opposed the logical or intellectualistic idealism of Hegel. All subsequent idealists have been divided by these issues. Neo-Kantians have advocated 'criticism' against metaphysics; while Neo-Fichteans and Neo-Hegelians have disputed over the relative priority of will and intellect. No sharp classification is possible, since such differences permit of an indefinite variety of compromises and combinations. But it will be worth our while briefly to examine these two leading issues.

'Critical' idealism aims at a strictly logical interpretation of Kant. It proposes, like Kant, to investigate the necessary conditions of knowledge; and concludes, as Kant concluded, that the categories which exact science employs are only varieties, applicable to specific empirical data, of certain fundamental forms of synthesis resident in the nature of thought itself. So that exact science is not a mere *description* of empirical data a posteriori, but a determination of them in accordance with certain a priori principles.

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[1] An admirable account of the varieties of contemporary idealism in Germany will be found in Ludwig Stein: *Philosophische Strömungen der Gegenwart*, especially Ch. I, IV, IX.

Critical idealists are divided in their interests in a manner corresponding to that difference between intellectualism and voluntarism which we shall consider below. Members of the so-called "Marburg School" have emphasized the logical presuppositions of mathematics and physics.[1] Natorp, for example, asserts that the nature of mathematical and physical truth can be understood only by showing that its special principles, such as 'number,' 'infinity,' 'space,' 'energy,' etc., are related to purely logical principles, such as 'quantity,' 'quality,' 'relation,' and 'modality' ("die logischen Grundfunktionen"), which in turn develop from the principle of synthetic unity, which is the original act of knowledge ("Grundakt der Erkenntnis"). Or, the principles by which the several sciences think their special objects may be traced back to the general principles by which anything assumes the form of object of thought (Gegenstand).[2] The form of the exact sciences is thus linked with the form of thought in general, which is incontrovertible, since any attempt to dispute it must presuppose it.

A second school of critical idealists emphasizes the foundations of the moral sciences.[3] The critical philosophy of value is to rescue ethics, æsthetics, history, and religion from a merely descriptive empiricism, and establish them upon a logic of the normative or ideal. There is, it is to be observed, a virtual conflict between this and the Marburg School, inasmuch as this regards logic itself as a science of value, and truth as an ideal; whereas the other regards value as in the end a form of intellectual synthesis. The question of the relative priority of the 'is' and the 'ought' (the "Sein" and the "Sollen") thus divides critical as well as metaphysical idealists into the opposing factions of intellectualism and voluntarism.[1]

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[1] The founder of this school is H. Cohen; cf. his *Logik der reinen Erkenntniss* (1902). The reader will find the doctrines of this school presented somewhat more clearly in Paul Natorp's *Die logischen Grundlagen der exakten Wissenschaften*, and in Ernst Cassirer's *Substanzbegriff und Funktionsbegriff*. The writers of this school are by no means exclusively occupied with mathematical and physical science; cf. Cohen: *Die Ethik des reinen Willens*.

[2] Natorp: *op. cit.*, pp. 10–11, 44–52.

[3] The Freiburg School (or "die südwestdeutsche Schule") is represented by Wilhelm Windelband's *Präludien;* Heinrich Rickert's *Der Gegenstand der Erkenntnis;* and H. Münsterberg's *Philosophie der Werte*, and *Eternal Values*. The writers of this school deal also with mathematical and physical science (cf. Rickert's *Grenzen der naturwissenschaftlichen Begriffsbildung*. They tend also to be more metaphysical than the Marburg School, and to merge into voluntaristic or ethical idealism. Cf. below, pp. 150–152.

The most interesting aspect of critical idealism is the interplay of its two motives, its criticism and its idealism. Its critical motive is most consistently expressed in its polemic against 'psychologism,' the Humian view which reduces experience to the particular mental states of the individual. 'Criticism' was born in Kant's proof that psychology presupposes physics and that both presuppose logic. Since Kant's time, every revival of Hume has been followed by a revival of this counter-thesis. The naturalistic movement in Germany in the latter half of the nineteenth century stimulated the counter-movement "back to Kant."[2] And similarly the present revival of 'psychologism' among pragmatists and positivists has provided a new occasion for protest. Again we are reminded that logic cannot be dissolved into the stream of human life without self-contradiction, for every definition of life presupposes logic. When in this mood 'criticism' seems far removed from metaphysical idealism. It is simply the assertion of the absolute priority of logic, with no more regard for mind than for matter. "Without logical principles, which lay hold of the contents of every impression," says Cassirer, "there is for it (critical idealism) no more an I-consciousness than there is an object-consciousness. . . . The thought of the I is in no way more original and logically simple than the thought of the object." [1]

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[1] Cf. Natorp: *op. cit.*, p. 51; Cohen: *Ethik des reinen Willens*, p. 79; and Rickert: *op. cit.*, pp. 165–167.

[2] Cf. F. A. Lange, O. Liebmann, and E. Zeller. Contemporary neo-Kantianism is linked with this earlier movement through Cohen.

And yet the fact remains that there is a marked difference between critical idealists and certain other contemporary writers who *also* maintain the priority of logic, but who have no Kantian affiliations.[2] The difference lies in the fact that while Kantians regard logic as the science of *thought* or *knowledge* ("Denken" or "Erkenntnis"), these writers regard it as a science of 'relations,' 'classes,' 'manifolds,' 'propositions,' 'propositional functions,' or other special entities, no more related to thought than are the numbers of the mathematician or the elements of the chemist. The peculiarity of these entities lies in their being so highly abstract as to be contained or implied in all other entities. They are necessary for thought only in that they are so ubiquitous that thought can deal with nothing without dealing with them.

Now whether this practice among neo-Kantians of calling logical principles the 'acts' of synthetic unity, or the 'functions' of thought, or the 'presuppositions of knowledge,' or the 'conditions of objectivity,' is no more than an accident of emphasis and hereditary verbal usage, I shall not seek to determine.[3] But of several conclusions we may be reasonably certain. In the first place, if the principles of logic *are* essentially inherent in thought or knowledge, and we are to accept the priority of logic over all other sciences, then an idealistic metaphysics is the only possible conclusion, if there is to be any metaphysics at all. The mind that owns the logical structure of reality must own reality outright. That the thought or knowledge in question is not the mental process of the finite individual does not affect this general conclusion in the least. It simply introduces a *new* conception of mind. The central idealistic thesis, that reality is dependent on *some mind*, is simply reaffirmed in a new sense. If, on the other hand, the principles of logic are *not* in any sense mental, then it is confusing and misleading to allude to them as the principles of thought or knowledge. And in either case, critical idealism is in unstable equilibrium. In so far as its logical motive is emphasized, it tends to become a special science like mathematics. In so far as its idealistic motive is emphasized, it tends, as it did in the systems of Kant's immediate successors, Fichte, Hegel, and the Romanticists, to assume the form of a metaphysics and philosophy of religion.

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[1] *Op. cit.*, p. 392.

[2] I refer to the "lay" logicians, beginning with Schroeder and Boole and represented most prominently today by Peano, Couturat, and Bertrand Russell. The reader will find Russell's *Principles of Mathematics* and *Principia Mathematica* the best source for this movement.

[3] The best discussion of the matter from the idealistic side is to be found in Cassirer, *op. cit.*, Chap. VII.

The English school of idealists, beginning with Coleridge, and comprising T. H. Green, Edward Caird, F. H. Bradley and Josiah Royce among its more recent exponents, has from the outset offered a religious philosophy based on the supremacy of consciousness. And the latter-day German movement flows steadily from neo-Kantianism to a neo-Fichteanism, neo-Hegelianism, or neo-Romanticism, in which the critique of 'psychologism' is only a subordinate motive in the construction of a spiritualistic *Weltanschauung*.

Metaphysical Idealism. Intellectualism

§ 6. Objective Idealism in its metaphysical form has fluctuated between the two poles of intellectualism and voluntarism. Its central thesis, as we have seen, is the dependence of being on a knowing mind that transcends and envelops both the physical and the psychical orders. But this subject may be held to consist either in a process of thought governed by logical motives; or in a primary activity, *expressing* itself in thought, but governed primarily by ethical motives. For Hegel, the classic representative of intellectualistic idealism, mind, or spirit ("Geist") is a primordial dialectic or train of ideas; an "Absolute Idea," "externalizing" itself in nature and reaching self-consciousness through the historical development of culture.[1] There have been two internal forces affecting the development of this version of idealism.

In the first place, the categories themselves, the several ideas with their own relations of logical necessity, tend to replace and render unnecessary the unifying conception of mind. The Absolute Idea tends to assume the form of a self-sufficient system, like logic or mathematics. As a contemporary idealist complains, "the 'Absolute Idea' is, in its self-evolution, of all things most inane, because it figures as thought — 'the impersonal life of thought,' as it has been termed — without a live Thinker."[2] Thus intellectualistic idealism tends to develop into a bare rationalism or necessitarianism, that is really closer to mechanism, than to spiritualism in the ordinary moral and religious sense. So that in the so-called "left wing" of the Hegelian school, idealism passed very easily and naturally over into its opposite.[3]

In the second place, Hegel's account of the process of mind, his enumeration and arrangement of the categories, was soon shown to be inadequate. Science in its independent development refused to comply. The special categories of nature, and even of history, had to be accepted from the several sciences operating in these fields. As a result the history of intellectualistic idealism has been marked by the steady reduction of the strictly spiritual categories — the a priori principles of pure thought — to the scantiest and most formal terms. Indeed it is not far from the truth to say that it now recognizes only one such category, that of *unity*. This obtains diverse formulations, such as the Caird's "self-consistent and intelligible whole"; Green's "unalterable order of relations"; Bradley's "Individual" or "complete system"; and Joachim's "systematic coherence," or "completely individual, self-sustained, significant whole."[1] In so far as these formulas purport to define a *maximum* or *ideal* unity, I shall discuss them in the next chapter.[2] Suffice it here to point out that the terms are so abstract and colorless, that they do not legitimately affect that issue between spiritualism and materialism, in which idealism appears as one of the principal champions.

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[1] Cf. Hegel's *Encyklopädie* (1816–1818), §§ 236–244, 381–382; trans. by W. Wallace, in his *Logic of Hegel*, and *Hegel's Philosophy of Mind*.

[2] James Lindsay: *Studies in European Philosophy*, pp. 223–224.

[3] This movement was represented by A. L. Feuerbach, David Strauss, Karl Marx, and others.

This is true whichever of the two following courses is pursued. It is possible, on the one hand, to adopt the categories of science, and superimpose the philosophical category of unity. The world is then simply that kind of systematic unity which the several sciences are progressively revealing, and idealism is no more than a formal endorsement of these sciences. Or, on the other hand, it is possible to pursue the agnostic course, and assert that beyond the reach of our knowledge there are categories which transmute the paradoxes of this world into a "total unity of experience," which "cannot, as such, be directly verified."[3] But such an absolute, concerning which nothing more is known than that it is somehow one, self-consistent, and all-inclusive, cannot properly be said to be spiritual; indeed, in so far as it signifies specific mental and moral predicates, spirituality must be regarded as one of those "partial aspects" which the absolute transcends.

Voluntaristic or Ethical Idealism

§ 7. The doubtful spirituality of a world defined exclusively to suit an intellectual demand constitutes a powerful motive impelling idealism to shift its basis from intellectualism to voluntarism. Intellect, so the voluntarist asserts, is only a *special* activity of consciousness. The general or fundamental activity of consciousness is not intellectual but moral. Consciousness owns and employs the categories in the service of its ulterior practical purposes. We are thus led from Hegelianism to Fichteanism. With Fichte, mind was the pure ego, endowed with freedom and activity, and "positing" in obedience to moral necessities, a "limited ego" in opposition to a "limited non-ego"; in other words, dividing itself into the counterpoise of spirit and nature.[1]

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[1] E. Caird: "Idealism and the Theory of Knowledge," reprinted from *Proceedings of the British Academy of Science*, Vol. I, p. 8; T. H. Green: *Prolegomena to Ethics*, pp. 29, 30; F. H. Bradley: *Appearance and Reality*, p. 542; H. H. Joachim: *The Nature of Truth*, pp. 76, 113.

[2] Cf. especially, pp. 183–188.

[3] Bradley: *op. cit.*, p. 530.

But the same fate which befell the logical metaphysics of Hegel, befell also the ethical metaphysics of Fichte. He did not succeed in moralizing nature any more than Hegel succeeded in rationalizing it. Mechanical science has pursued its own independent course, steadily and irresistibly; and voluntarism like intellectualism has been forced to ratify its conquests. The result is that voluntarism is forced either to limit the scope of its categories to the field of moral science proper, or to divest these categories of their narrower and stricter meaning in order to maintain their limitless scope.

The former alternative is adopted in so far as voluntaristic idealism is simply a protest against attempts to mechanize the sciences of value. When voluntaristic idealism goes beyond this insistence on the autonomy of moral science within its own limited field, and asserts its *ultimate* priority, it becomes necessary to construe logic also as a normative science. Judgment becomes an act of will, and truth its norm. Reality, being reduced to knowledge by the usual idealistic arguments, is thus made an expression of will.[2] But when the will is thus identified with the will to know, it amounts to no more than the reaffirmation of things as they are. The cognitive or logical will is the will of the passionless sage who has renounced every special preference, and schooled himself to an acquiescence in whatever is objective and necessary. As knower, I will that there shall be a world; and having once so willed, I must take it as I find it and yield to *its* demands.[1] I have not interpreted the world to harmonize it with will, but have emasculated will into an assent to the world as it is.

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[1] Fichte: *Grundlage der gesammten Wissenschaftslehre* (*Science of Knowledge*) (1794), trans. by A. E. Kroeger, pp. 79 sq.; and *Das System der Sittenlehre* (*Science of Ethics*) (1798), trans. by Kroeger, pp. 67 sq.

[2] Cf. below, pp. 161–162. For the voluntarism arising from non-idealistic motives, such as 'neo-vitalism,' cf. Bergson, as treated below, pp. 261–264.

The fate that befalls a strict voluntarism is thus similar to that which befalls a strict intellectualism. Specific categories drawn from thought or from the moral life, break down when used for the purpose of interpreting nature; and then when the categories are corrected to suit nature, they lose their specifically spiritual character. There is no saving grace in such a philosophy; and it does not constitute a possible resting-place for the idealistic mind.[2]

Neo-Romanticism

§ 8. The romantic alternative alone remains, as apparently the inevitable destiny of idealism. It is generally recognized that contemporary German thought has been repeating the phases through which the Kantian movement originally passed.[3] Whether neo-Kantianism, neo-Fichteanism, neo-Hegelianism, and neo-Romanticism have observed the chronological order of their prototypes is doubtful. But the interplay of motives is strikingly similar to that of German thought at the opening of the last century, and in nothing more than in the emergence of romanticism.

Romanticism may take the agnostic form, and reduce the various concrete manifestations of spirit to some ineffable life which engulfs and negates them. This was the method of Schopenhauer, and as revived in Hartmann's theory of "the Unconscious," and in the earlier phases of Nietzsche's thought, it plays no inconsiderable part in the present movement. But there is another form of romanticism that is more hospitable as well as more positive in tone. If it is impossible to construe the world in terms of thought, or in terms of moral life, there yet remains a further conception, complete enough to embrace these and every other possible value, — the conception of a universal *spiritual life* ("geistiges Leben"), that shall be infinitely various and infinitely rich. Thus there arises the syncretistic and developmental romanticism, which is the popular movement of the day in German thought.

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[1] Cf. Münsterberg. See below, pp. 178–179.

[2] Wherever the metaphysical motive is strong, ethical idealism tends to approach romanticism. Thus Münsterberg (*op. cit.*) stands nearer to romanticism than Windelband and Rickert, as he in turn falls short of the advanced position of Th. Lipps ("Naturphilosophie," in *Philosophie im Beginn des Zwanzigsten Jahrhunderts*, Festschrift for Kuno Fischer, second edition). The common metaphysical motive in voluntarism and romanticism is significantly expressed by the new idealistic organ, *Logos;* cf. Vol. I, 1910, p. 1.

[3] The so-called "review-course" (Repetitionskursus). Cf. Oscar Ewald: "The Present State of Philosophy in Germany," *Phil. Review*, Vol. XVI, 1907, pp. 238 sq.

"I have shown," writes Ewald, "that it is more and more the tendency of the most diverse thinkers to regard the world as a fulness, exhibiting contradictions and antinomies only in the human spirit. In this way one-sided logicism is overthrown. Logic, morality, art, and religion enjoy in their own realms complete sovereignty and cannot be reduced by psychological or empiristic attempts to anything merely relative or temporal. This sphere, however, is not the whole, but only a part of inexhaustible reality." Or, as it is expressed by Dilthey, for whom philosophy is a study of the great interpretations of life ("Weltanschauungslehre") in all their historical variety: "It is not the relativity of every *Weltanschauung*, that is the final word of the spirit which has passed through them all, but rather the sovereignty of the spirit, as opposed to each and every one of them; and at the same time the positive consciousness that, in the different attitudes of the spirit, the One Reality of the world is given us, the persistent types of *Weltanschauung* being the expression of the many-sidedness of the world." The same philosophy finds an eloquent and influential exponent in Rudolph Eucken, who proclaims the self-sufficiency of the spiritual life

("Selbstständigkeit des Geisteslebens") — of that "cosmic life that forms the essence of things," and is apprehended in a spiritual immediacy.[1]

Romanticism does not lend itself to vigorous criticism: it is not so much a philosophy as a faith. In romanticism, "the cause of the Spiritual Life is loyally championed by the soul against the pretensions of an alien or at least dissatisfying worldliness." Little attempt is made to free the conception of the 'geistiges Leben' from its indeterminateness and promiscuity; or to defend its priority by orderly argument. Proof is as little congenial as analysis to such a mood of riotous spirituality. The spiritual life is an act to be performed, a privilege to be "freely appropriated," rather than an idea to be defined and established. Its real motive force "lies in the impulse towards spiritual self-preservation." It springs from "the desire for a philosophy which seeks to regard reality from the inside and from the point of view of the whole, and which . . . strives to raise the whole of human life to a higher level."[2]

In other words it becomes in the end a question of the function of philosophy. If philosophy be an attempt to inspire men with noble and elevating sentiments, the romanticists are perpetually right. But if philosophy be the attempt to think clearly and cogently about the world, and lay bare its actualities and necessities — for better or for worse — then romanticism is irrelevant. It is not a false philosophy; it is simply not, in the strict theoretical sense, a philosophy at all.[3]

§ 9. Before concluding, we shall do well to inquire whether this great movement, with all the brilliancy and versatility of mind which it has displayed, has proved its case. Has objective or transcendental idealism, the idealism of Kant and of those whom he inspired, established or strengthened the general contention of idealism?

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[1] Ewald: *op. cit.* (con.), *Phil. Review*, Vol. XVII, 1908, p. 426; W. Dilthey: "Das Wesen der Philosophie," in *Systematische Philosophie* (Hinneberg's *Kultur der Gegenwart*), p. 62; R. Eucken: *Life of the Spirit*, trans. by F. L. Pogson, p. 327.

[2] Eucken: *op. cit.*, pp. 332, 403; and *The Meaning and Value of Life*, trans. by L. J. and W. R. B. Gibson, pp. 98, 126.

[3] Cf. above, pp. 29–30, 40–41.

The New Idealism and the Cardinal Principle

In the first place, it is clear that the cardinal principle of idealism remains what it was with Berkeley. It is asserted that consciousness in some form, especially consciousness in its cognitive form, is the one necessary and universal condition of being. It is idle and misleading for contemporary idealists to slur the fundamental place of the conscious subject in their scheme of reality; to resort, for example, to a seemingly neutral or colorless conception like 'experience.' This conception is used by certain non-idealistic writers[1] to mean the bare aggregate of entities, not as yet brought under the form of either mind or body. But for idealists experience means the contents of consciousness, construed as such. Thus when Mr. Joachim refers to that "Ideal experience" in terms of which he defines truth, he means not the systematic totality of things merely, but such a totality *witnessed* and *comprehended*. This explains why he is not satisfied with the phrase "significant whole." For "if 'experience' tends to suggest the experiencing apart from the experience, 'significant whole' tends to suggest the experienced apart from the experiencing." "We want a term," he says, "to express the concrete unity of both, and I cannot find one." Now I think that Mr. Joachim is mistaken in thinking that the term experience is defective in the respect to which he refers. The danger is rather that, as used by idealists, it shall obscure the fact that they mean content of consciousness, and not merely *things*. Indeed I strongly suspect that it owes its vogue to its ambiguity; otherwise I cannot account for the abandonment of such downright terms as 'state,' 'percept,' 'idea.' Surely these terms answer perfectly to the demand that things shall be construed as present to consciousness, and consciousness as made up of content. In any case, it is clear that the "concrete unity" to which this author refers is a unity of consciousness.[1]

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[1] By James, for example; cf. below, pp. 364-365.

An alternative phrasing of objective idealism is to be found in the writings of Edward Caird. Thus he writes: "The main result of modern philosophy and especially of modern idealism has been to put a concrete, in place of an abstract unity, or, in other words, to vindicate the essential correlation of the self and the not-self."[2] Now this does not mean merely that the self and the not-self are in some sense necessarily related; and does not follow from any general proof of the systematic unity of the world. It means that it is essential to everything to stand in the specific relation, *for-a-self;* that the simplest possible entity is a self with its content, or an object engaged by a conscious mind. The unity to which the idealist refers is not a unity between consciousness and something else, but a unity *of* consciousness.

The New Proof of Idealism from Synthetic Unity

§ 10. Supposing it to be granted, then, that objective or transcendental idealism, like Berkeleyan idealism, is founded on the assertion of the primacy of consciousness; we may now ask whether this version of idealism has advanced new arguments in support of that assertion. One is compelled to express astonishment at the common failure of idealists to separate this question, and deal with it proportionately to its importance. But the new idealism does urge at least one new argument — the argument from the 'synthetic' function of consciousness. It is contended that consciousness affords the only genuine unity, and that since the world requires unity it must derive it from consciousness.

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[1] H. Joachim: *op. cit.*, pp. 83–84, note. The same comment will apply to the use which Rickert and others make of the conception of 'immanence' to describe the most universal form of being. 'Immanence' is meaningless except in relation to a subject, and the theory of universal immanence does not really differ except in unclearness from a more explicit theory of universal consciousness. Cf. Rickert: *Der Gegenstand der Erkenntnis*, pp. 24–25.

[2] Edward Caird: *op. cit.*, p. 6.

Green, for example, asserts that reality must be regarded as "an unalterable order of relations." "But a plurality of things cannot of themselves unite in one relation, nor can a single thing of itself bring itself into a multitude of relations." They require the "combining agency" — intelligence. "Either then we must deny the reality of relations altogether and treat them as fictions of our combining intelligence, or we must hold that, being the product of our combining intelligence, they are yet 'empirically real' on the ground that our intelligence is a factor in the real of experience."[1]

Similarly, Mr. McTaggart asserts that the only intelligible kind of unity is that in which "the unity is at once the whole of which the individuals are parts, and also completely present in each individual." And "this relation between the individuals and the whole . . . . is that particular relation of which the only example known to us is consciousness."[2]

The only possible justification for this train of reasoning is the supposition that terms must somehow penetrate their relations and relations their terms, so that some peculiar agency is required to prevent their either fusing or falling apart. This is the so-called 'internal theory' of relations, which is not only contrary to the usage of science and common sense, but incapable even of being expressly formulated. Mr. Bradley is driven in despair to conclude that "a relation always is self-contradictory," and that to find a solution we must "pass entirely beyond the relational point of view." He obtains no illumination of the question from the character of consciousness. For this simply repeats "the old illusory play of relations and qualities," "at a higher level than before." But for some inscrutable reason, Messrs. Green and McTaggart find the *intellectual operation* of relating, or the *consciousness* of many in one, more intelligible than bare relation itself. I can explain their procedure only by attributing it to a willingness, exhibited by modern thinkers in general, and by idealists in particular, to abandon analysis and rigor of thought when consciousness is in question.[1] If there be any peculiar virtue in consciousness to relieve the difficulty of 'unity in plurality,' it is a miraculous virtue; whose secret, if it has been discovered, has certainly never been successfully communicated.

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[1] T. H. Green: *op. cit.*, pp. 29–32.

[2] J. M. E. McTaggart: *Studies in Hegelian Cosmology*, pp. 14, 19. Cf. also M. W. Calkins: *The Persistent Problems of Philosophy*, pp. 378–379.

The Revival of the Berkeleyan Arguments

§ 11. But the majority of idealists do not even attempt, as do Green and McTaggart, to find a new proof of idealism; they are satisfied to rest their case on the old Berkeleyan grounds. The fallacy of 'argument from the ego-centric predicament' is precisely the same, whether knowing be construed empirically with Berkeley, or rationalistically with the followers of Kant. Thus the categories cannot be known without being thought; from which it is falsely inferred that they cannot *be* without being thought.

This fallacy is perhaps less characteristic of the new idealism than the other Berkeleyan fallacy of 'definition by initial predication.' Here one begins by discovering that the categories are *conditions of knowledge.* But having once taken their place upon the stage in this rôle, they are straightway *identified* with it. They are *defined* as *what one needs in order to know.* They become the instruments of a hypothetical activity governed purely by the cognitive motive. This activity becomes a will to know, which seeks its own by a definite procedure and imposes its conditions on everything with which it deals. The necessities of knowledge are construed as its demands, and the world of science as its conquest and domain.

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[1] F. H. Bradley: *op. cit.*, pp. 112, 445. Professor Royce, like Mr. Bradley, admits that the difficulty of relations is aggravated rather than relieved in the case of consciousness, but believes that the difficulty may be met by the modern mathematical theory of infinity. Cf. *The World and the Individual*, First Series, Supplementary Essay. On the 'internal' and 'external' theory of relations, cf. below, pp. 244–246, 319–320; and above, pp. 101–102.

But the guise in which things first appear is not to be assumed to be their native dress. It may be in any degree accidental and external. That the categories may be conditions of knowledge *only accidentally*, is apparent when one reflects that any entity whatsoever may be cast in that rôle. The color red may be used as a danger-signal; a spacial distance, such as a metre or a foot, may be used as a unit of measurement; the weight of water may be used as a standard for the determination of atomic weights. But one does not therefore conclude that these things are *essentially* conditions of knowledge.

There is no difference between these cases and the cases of the traditional formal categories, save the wider generality of the use to which the latter may be put. And the explanation of this may at least as reasonably be found in the nature of *things*, as in the nature of knowledge. If knowledge must conform to its objects, then every necessity in things is a necessity for true thought about those things. Thus if one is to know right-angle triangles, one must judge that the square on the hypothenuse is equal to the squares on the other two sides. And as spacial implications are necessary for geometrical thought; so, if there are any universal implications residing in the nature of all things, implications belonging to the province of logic, then they are necessary for all thought. But the necessity lies ultimately in the nature of things, and *is binding on thought only so far as thought is bound to things.* Were all things blue, blue would then be an indispensable condition for the knowing of anything; but it would not on that account bear any closer relation to the cognitive *subject* than it does now. All things are, let us assume, *related.* It follows that it is impossible to know anything without knowing it in relation. Not, however, because knowing implies relating; *but because being implies relation, and knowing must seize upon the nature of its object.*

As a matter of fact, objective idealism has deduced the categories from the object and not from the subject. To deduce the categories from the subject it would have been necessary to define the subject — which the idealist has consistently omitted to do. The subject has been a bystander, whose familiar presence has gradually assumed the appearance of indispensable necessity. It is, to be sure, the contention of some idealists that it is possible to know necessities only in so far as knowledge itself imposes them. Knowledge, Kant said, must control its objects if it is confidently to assert anything concerning them. But it is to be observed that the necessities of thought are derived by the objective idealist, not from thought as the moral-psychical process of the individual mind, but from thought standardized, from thought so far as true. It is the pragmatist, and not the idealist, who attempts to deduce the categories from the concrete, existent subject; and the idealist is the first to charge him with subjectivism and relativism. The idealist deduces the categories from the subject *in so far as conformed to the objective nature of things*, and thus, in the last analysis, *from* that objective *nature of things*. The actual subject, then, does not impose necessities on nature, but yields to necessities which are dictated to it by something beyond itself.

The idealistic version of the categories receives illegitimate support from the fixed disposition in modern times to regard sense as receptive, and *thought as creative*. While we 'receive' impressions, we are supposed to 'form' ideas. But this is sheer prejudice or verbalism. A body must be *perceived* in order to be known, and an implication must be *thought* in order to be known; but there is no more reason or sense in asserting the knowing to be necessary to the being, in the one case than in the other. The general question of the dependence or independence of things known on the knowing of them, has really nothing to do with the narrower question of the priority of sense or thought. The more general question cannot be discussed intelligently without an analysis of the knowing subject, in which it is brought from its functional place in the background and placed in the foreground of study, like any other entity. It may then be possible to discover its particular nature; and the particular nature of that peculiar relation which it sustains to those other things which are its objects; and finally whether that relation is or is not essential to the objects.

The procedure of voluntaristic idealism in establishing the priority of will, purpose, or the judging activity with its ideals and norms, affords a peculiarly clear illustration of the Berkeleyan arguments. Thus Rickert writes: "We know nothing of a being that is, except it be judged to be, and no one knows anything of it, . . . for how could he know without having judged, and how could he judge without thereby recognizing an ought?" Now doubtless being *is* a predicate of judgment; and doubtless judgment like all activities is subject to a determinate obligation of its own. When I set out to know, reality is my destination, and prescribes the course of my action. Or, as Professor Royce expresses it, "the Other which Thought restlessly seeks" is "nothing but the will of the idea itself in some determinate expression."[1] But why identify things with the cognitive adventure at all? I am no more justified in defining that which is my norm or purpose, my goal or destination, *in terms of this relation*, than I am justified in defining the office in terms of the office-seeking, or a geographical locality in terms of travellers who journey toward it.

The reasoning of idealism has grown in popular effectiveness as European thought has acquired the habit of viewing reality as the idealist views it. So strong is this habit that many idealistic books are written with no attempt whatsoever at proof. We are invited to view the world as 'experience,' 'task,' 'situation,' 'truth,' 'goal,' or, in some others terms, as *object of consciousness*; and it is thereupon assumed without further ado that this aspect of the world, simply because it is there and may be selected, is definitive. But unless it can be proved that the relation of things to life, when they do sustain such a relation, is the relation which bestows on them both their nature and their being, there is no difference between such idealism and a sheer romantic or spiritualistic bias.

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[1] Rickert: *op. cit.*, pp. 156–157; Royce: *op. cit.*, pp. 588, 333.

Objective Idealism as an Escape from Subjectivism

§ 12. Before bringing this chapter to a close we must inquire whether objective idealism has accomplished its restricted domestic task of saving idealism from a vicious subjectivism. There is but one crucial consideration here. Has idealism employed such a subjectivism, or has it been able to dispense with it? For it must be admitted that no philosophy can without contradiction both employ and reject the same assertion.

The answer would seem to be perfectly clear. Idealism gets its proof from putting a certain construction on human consciousness, that being the only instance that comes under observation. The idealist must, then, first regard human consciousness as constitutive of its objects. Where this theory is strictly maintained, it holds not only of the individual consciousness, but even of the momentary consciousness. But the idealist himself sees that this involves contradictions. It provides no way of distinguishing the true or valid cases of knowledge from mere opinion. All cognitive states are made equally authoritative with reference to their objects. And where, as often happens, the same object is differently and inconsistently known in several cognitive states, there is no way of relieving the contradiction. So objective idealism is led to attribute constitutive validity only to some standard or universal consciousness, which shall afford objects their true and permanent ground.

But this requires a correction of the initial interpretation of the individual or momentary consciousness. We must now suppose that these instances of consciousness do *not* constitute their objects; but either conform to them or misrepresent them. In other words, objects are now *independent* of those concrete instances of consciousness which first came under observation. And then what becomes of the proof of idealism? Having construed his own and his neighbor's consciousness realistically, where is the idealist to find the analogy for his hypothetical universal consciousness? And what *occasion* is there now for a universal consciousness? Had the idealist *begun* with a realistic version of human consciousness, the error of subjectivism would never have arisen, and his universal consciousness would have been a gratuitous as well as a meaningless invention.

Thus the error which idealism corrects with so much ceremony proves to be indispensable to its own inner development. The error must be cherished if there is to be any demand for remedial intervention. Subjectivism cannot be abolished; it must, as has been frankly avowed, be retained as a "*Durchgangstadium*" on the way to a complete idealism.[1] But either objective idealism must be taken as rejecting subjectivism, in which case it must banish it altogether from its councils, and start from an account of human consciousness that is wholly free from it; or it must be taken as accepting subjectivism, in which case it stands condemned by its own admissions.

The basal arguments for idealism are the same as those for subjectivism. The arguments from 'the ego-centric predicament,' and from 'initial predication,' if they prove anything, prove subjectivism — even the extremes of relativism and solipsism. If they do not prove anything, then idealism, subjective and objective alike, is left unproved. In either case, the ground on which the idealistic system has been erected affords no reliable support. Whether this system is to be valued as an illumination of life cannot yet be judged. For there is another primary motive, the motive of absolutism, with which the cardinal idealistic principle has come to be allied. And it is impossible to reach any final estimate of idealism as a religious philosophy without examining absolutism on its own independent grounds.

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[1] Cf. Rickert. *op. cit.*, p. 56.

CHAPTER VIII

ABSOLUTE IDEALISM AND RELIGION

The General Meaning of Absolutism

§ 1. THE religion of an idealist is not a forlorn hope, or a defence of last ditches, but an enjoyment of all the emotions of sovereignty. Idealism undertakes to substantiate the extreme claims of faith, — the creation of matter by spirit, the indestructible significance of every human person, and the unlimited supremacy of goodness. The terms of a devotional mysticism — Spirit, Perfection, Eternity, Infinity — appear in the very letter of its discourse. Nor has this promise of good tidings been unheeded. Idealism has acquired prestige and a position of authority. While it has little if any direct access to the popular mind, it is resorted to habitually by the middle men of enlightenment, by clergymen, litterateurs, lecturers, and teachers. Hence it comes about that many an honest man has invested all his hopes of salvation in the adventure. And this is my apology for undertaking to audit its accounts; the question of its solvency being of no small human importance.

The religious creed of idealism may be said to contain two major articles. The one of these is the cardinal principle already examined — the assertion of the priority of consciousness in the act of cognition. The second article is the principle of *absolutism* and with this we shall, in the present chapter, be chiefly occupied.

The sense in which I propose to employ the term 'absolutism,' is to be distinguished from two other senses in which it is also currently employed. These other uses of the term appear, it is true, chiefly in the writings of idealists; but they may nevertheless be regarded as quite independent. In the first place, 'absolute' is often taken to mean the antithesis of 'relative'; and is used to characterize such fact, being, or truth, as is independent of the vagaries of a fallible mind. But it is quite possible to accept absolutism in this sense, as indeed it is accepted both by naturalism and by realism, without accepting any of the distinguishing premises of absolute idealism.[1] In the second place, 'absolute' may be taken to mean 'certain,' as opposed to 'probable' or 'hypothetical.' Absolutism in this sense signifies the theory that some truths are indubitable; capable of being established dialectically, and not subject to correction by experience. But this theory relates to a special question of methodology or logic which may be treated quite independently of the broader issues raised in the present discussion.

As I shall employ the term, absolutism means the assertion of a *maximum* or *superlative ideal* having metaphysical validity. This ideal, variously construed as "the Good," "the Infinite Substance," "the *ens realissimum*," "the Universal Will," etc., is *the* Absolute; or, in the language of religion, God. Absolutism in this sense may, and commonly does, embrace absolutism in the first and second senses; for one may maintain that such an ideal alone possesses objective validity and certainty, and escapes relativity and contingency. But I shall from thenceforth employ the term in this third and most general sense.

It will be remarked that absolutism is closely related to 'the speculative dogma' which we have already encountered as a motive in naturalism.[2] This dogma consists in the assumption of an all-general, all-sufficient first principle; and arises from the tendency to anticipate that complete unification toward which knowledge appears progressively to move. Absolutism is the expression of this motive in its purity. It is the formulation of the goal of knowledge from an analysis of the process and trend of knowledge; and the assertion of that goal as necessary. So that while absolutism is allied with naïve naturalism in its acceptance

[1] Cf. below, pp. 335–340.

[2] See above, pp. 64–65.

of the speculative ideal, it is distinguished therefrom by its method. It regards the speculative ideal *as* an ideal, and expressly formulates it as such. Thus absolutism is not merely *monistic*, as is naïve naturalism; but is also *normative*, in that its cosmic unity is the limit or standard of the activity of thought.[1]

The motive of absolutism is evidently quite independent of the cardinal principle of idealism. Absolutism, indeed, had already had a long and significant historical development of its own, prior to the advent of idealism. Hence in order to understand 'absolute idealism,' the union of the two, we shall do well first to isolate absolutism, and examine it on its own grounds. And for this purpose it will be convenient to confine our attention to two great exponents of this doctrine, Plato and Spinoza — the one ancient, the other modern. These great thinkers are eminently representative of an absolutism that did not enjoy the support of idealism. The characteristic difficulties which beset their philosophies are the characteristic difficulties of absolutism proper; and having comprehended them, we shall be in a position to judge of the success of absolute idealism in overcoming them. These characteristic difficulties are, I believe, three: *formalism*, *equivocation*, and *dogmatism*.

Formalism, Arising from the Logical Basis of Absolutism

§ 2. Absolutism's first and only undisputed success was the discovery of logic. This science began when it was observed that the 'things' of practical common sense, the gross objects of motion, manipulation, and social intercourse, could be analyzed; and that such analysis revealed certain highly general and perhaps universal terms of discourse, such as 'being,' 'negation,' 'unity,' 'manyness,' 'space,' 'number,' etc.[2] While the list of these

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[1] In other words, absolutism is 'idealistic' in the popular sense of the term. I have employed this term exclusively to refer to the theory of the priority of consciousness. It is unfortunate that the same word should refer to this, and also the quite different notion of 'ideals.'

[2] Plato is perhaps the founder of logic in this sense. Cf., e.g., the *Parmenides*.

'categories,' or 'logical constants,' is by no means finally made up, there can be no doubt that *there are such entities.* In other words there are some terms that satisfy the condition of unlimited *generality.* And this fact alone would entitle absolutism to respectful consideration.

But absolutism demands much more. These general categories must be *unified* and proved *all-sufficient.* They must either form a systematic whole or be deduced from some supreme category; and this higher unity, in turn, must explain the facts of existence. Plato defined this systematic unity or supreme category as the "good." "When a person starts on the discovery of the absolute by the light of reason only, and without any assistance of sense, if he perseveres by pure intelligence, he attains at last to the idea of good, and finds himself at the end of the intellectual world." What, in the last analysis, Plato meant by the good it is impossible to say, without falling into those equivocations which I am going to treat separately under the next heading. But confining ourselves for the present to the relatively logical aspect of Plato's conception, we may say that he meant by the good, the *significant,* the *intelligible*—that which has *meaning.* The categories, in their own inner "dialectical" relations give meaning to things, and so are not only "the author of knowledge in all things known, but of their being and essence" as well.[1]

Now admitting that for logical reasons all things must be regarded as significant, or as having meaning, it is no less clear that an ultimate principle, such as this, in which every concession has been made to generality, is *grossly inadequate to everything to which it applies.* What has been gained in breadth has been lost in thickness. The rich nature of concrete objects is left wholly out of the account, and has no necessary relation whatsoever to the first principle. Why this particular world should be as it is, one does not in the least understand from the bare conception of significance or meaning. This sacrifice of sufficiency to generality, this neglect of the insufficiency of purely logical categories, is what I mean by the error of *formalism.*

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[1] *Republic,* trans. by Jowett, 532 A, 508 E, 509 B. Cf. above, pp. 31, 114–115.

Let us consider the same difficulty in connection with the absolutism of Spinoza. That philosopher cleared himself of what he regarded as a confusion in Plato between logic and teleology, and sought to establish his system upon the firm basis of the deductive method. His supreme category is *substance*; and by substance he means "that which is in itself, and is conceived through itself."[1] In other words substance is *definite*, that is, possesses certain inherent attributes; and *self-sufficient*, that is, possesses all modes of itself internally. Substance is not necessarily good, since that conception refers properly only to human interests, and is therefore limited in range; substance is simply an eternal and inalienable nature, together with its inexorable implications. In this sense, according to Spinoza, substance is the universal principle.

But though this may be a *general* characterization of reality, it is hopelessly *inadequate.* It throws no light whatsoever on what in particular things are, and on what in particular they imply. They might be and imply anything, so far as this conception is concerned. It is and remains a logical conception, referring to the most general or abstract aspect of experience, and leaving all that remains, the vast bulk of nature and history, wholly out of account.

It is true that Plato did not mean to define reality in terms of bare intelligibility, and that Spinoza did not mean to define it in terms of bare substantiality. Nevertheless they did not, I think, succeed in doing more, in so far as they confined themselves to strictly logical considerations. And only so far as they did so conceive the absolute in abstract logical terms, were they able to prove its unlimited generality.

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[1] *Ethics*, trans. by Elwes, p. 45; cf. Part I, *passim.* Cf. above, pp. 33, 115–117.

§ 3. If the absolute is, then, to be all-sufficient as well as all-general, it must be endowed with other than purely logical characters. The logical first principle must be interpreted and amplified by borrowing the more sufficient terms of nature or life. But these terms while they are clear in their limited application, at once become equivocal when generalized.[1]

Equivocation, Arising from the Attempt to Escape Formalism

Let us consider, for example, Plato's attempt to construe meaning or intelligibility in terms of some concrete human variety of goodness. Experience doubtless affords analogies, but *only analogies that are essentially limited in application.* Thus a well-organized society, in which human interests are harmoniously adjusted and brought to fulfilment, may be said to owe its meaning to the propriety and excellence of its activities. To be understood at all it has to be understood as good. But the concepts of political theory are of limited generality. Not even society in its historical form can be said to be a true polity; while nature falls outside the range of such principles altogether. Similarly, art, where this is ideal, is also intelligible in so far as good. But neither is nature art, nor is all art ideal. The ultimate good, then, can be neither a perfect society nor a perfect work of art, because these conceptions, while they are sufficient and illuminating in a certain context, are not all-general.

There is a third sense in which the intelligible is good: as the consummation of the theoretical interest — the truth sought and won. But here again it is clear that we have to do with a particular and complex process which it is impossible to generalize. There is no reason to suppose that all things whatsoever are comprehended within one moment of ecstatic contemplation. Without the use of the idealistic principle (of which Plato was quite innocent) such a contention cannot even be made plausible. The truth that is enjoyed, is but a small fraction of the being that is. Furthermore, though we narrow the world to the process of thought, it must yet be objected that not all thought is crowned with success.

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[1] We have already observed this fact in the case of attempts to generalize physical concepts. See above, pp. 69, 71 ff.

What, then, is that perfect goodness which is the author of the "being and essence" of all things? Clearly it is not a case of moral goodness, or of beauty, or even of truth, in the sense of intellectual happiness. And yet Plato freely attributes all three of these values to it! But does he mean to do so *literally?* It is impossible to say; for at this point the absolutist begins to speak a strange tongue. The good is not good in any known sense, only because it is of surpassing goodness. It is more, not less — than virtue, beauty, and insight. Now to be good, and to have goodness enhanced by other values beside, this truly is to be more than good; but to be lacking in goodness through excess of it, to be more than good and yet not good at all — this passes comprehension. And yet precisely this profound and misleading equivocation lies at the root of all Platonic *mysticism.*

An admirable illustration of this procedure of thought is afforded by the theology of Dionysius the Areopagite, the Christian neo-Platonist. I quote from Berkeley's account.

"In his treatise of the Celestial Hierarchy, he saith that God is something above all essence and life; and again, in his treatise of the Divine Names, that He is above all wisdom and understanding, *ineffable and innominable;* the wisdom of God he terms an unreasonable, unintelligent, and foolish wisdom. But then the reason he gives for expressing himself in this strange manner is, that the Divine wisdom is the cause of all reason, wisdom, and understanding, and therein are contained the treasures of all wisdom and knowledge. He calls God ὑπέρσοφος and ὑπέρζως; as if wisdom and life were words not worthy to express the Divine perfections: and he adds that the attributes unintelligent and unperceiving must be ascribed to the Divinity, not *κατ᾽ ἔλλειψιν*, by way of defect, but *καθ᾽ ὑπεροχήν*, by way of eminency; which he explains by our giving the name of darkness to light inaccessible."[1]

In its endeavor to give concrete sufficiency to its first principle, absolutism is thus driven from one error to another — from formalism to equivocation. The truly general, or logical, elements of experience having proved insufficient to the complex objects in which they are found, conceptions that *are* sufficient within limits are now rendered equivocal through being employed symbolically or analogically beyond those limits.

The Dogmatic Character of Absolutism. Agnosticism

§ 4. The nature of the all-general, all-sufficient principle thus remains problematic, because the most general categories are insufficient, and the most sufficient categories are limited in generality. What, now, shall be said of the *proof* of such a principle? It is argued that knowledge employs a principle which admits of degrees; that knowledge can be complete only when this principle reaches a maximum; and that since we must attribute to reality the character it obtains in complete knowledge, we must define it in terms of such a maximum. It appears, however, that *the principles which knowledge employs do not define a maximum;* and that were their limitations removed they would at once lose their meaning.

Let us turn again to the case of Plato. He would say that we know things in so far as we apprehend them as good; and would proceed to infer their absolute goodness. But in every verifiable case of such knowledge the goodness of things is limited. Thus, for example, the activity of the wise ruler is good and intelligible in that it answers to the demands of social life, and to concrete historical exigencies. Without reference to these limiting conditions it is impossible to define the goodness of the ruler; and if that reference be condemned, then the *method of definition* is condemned. There is no ground for the assertion of a perfection so exalted that it shall be limited by no conditions whatsoever.

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[1] Berkeley: *Alciphron or the Minute Philosopher*, Fraser's edition, Vol. II, pp. 182–183. Berkeley's comment is as follows: "Upon the whole, although this method of growing in expression and dwindling in notion, of clearing up doubts by nonsense, and avoiding difficulties by running into affected contradictions, may perhaps proceed from a well-meant zeal, yet it appears not to be according to knowledge."

Nor is the situation essentially altered if a more general conception of value is employed. Suppose that we define the activity of the ruler in terms of the demands of social life, and then define these in terms of the demands of human nature. Social life itself may then be understood in the Platonic way, as the organization of activities necessary to the expression of the ideal essence of man. But even so, although what man does may now be understood as good in terms of what man is, the ideal *essence* of man has itself to be defined in terms of categories that are not teleological at all. And if this be regarded as vicious, then the whole method is vicious. Similarly, every case of knowledge by teleological principles involves the apprehension and acceptance of some elements which are not determined by such principles. We are not justified in projecting a good that shall be *all* good, or a teleological system that shall be *through and through* teleological, for this would be to contradict the meaning of goodness and teleology.

Nor does absolutism succeed any better if we substitute the mathematical-deductive logic of Spinoza for the teleological logic of Plato. Spinoza thought that the conception of substance implied the conception of an absolute substance that is "self-caused" in that its "essence involves existence"; and "infinite," in that it contains all attributes in its definition, and implies all things and events as its modes.[1] But precisely as there is no absolute maximum definable in terms of goodness, so there is no absolute maximum definable in terms of deductive necessity. The actual deductive systems of human knowledge are those in which, as in the case of Euclidean geometry or the Newtonian mechanics, the axioms, postulates, indefinables, etc. — that is, the terms and propositions that are *not* deduced — are few and fruitful. The investigator doubtless makes them as few and as fruitful as possible. But there is no deductive principle that determines *how* few or *how* fruitful they shall be. The deductive method, which is the basis of Spinoza's system, clearly requires *some* elements that are not deduced. These elements stand in certain simple relations, such as difference, to one another; but they are not brought under the determination of the principles of the system itself. Now this being the case, it is clearly absurd to infer an absolute system in which every element shall be deduced — a system in which, through excess of deductive cogency, the very conditions of deduction shall be removed!

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[1] Spinoza: *Ethics, loc. cit.*

Or, if this be untrue to Spinoza's real intent, it is still gratuitous even to infer that there shall be but *one* deductive system. There is, let us grant, a universal totality;[1] but is there any reason why it should possess any definite degree of deductive unity? Is there any reason why that totality should not be composed of many systems which are related to one another, as are the non-deductive elements within these several systems? Now if it be contended that this is equivalent to the assertion of a single all-embracing system, of which the particular systems, such as geometry, mechanics, ethics, etc., shall be the axioms, then we have only to remind ourselves of the entire insignificance of such a contention. There is no ground for determining whether these several systems, together with such systems as exceed present knowledge, form a highly coherent or a loosely collective system. It is entirely possible that together they imply nothing other than that which they imply severally, except the collective totality of all that they imply. In other words, we are justified in saying no more than that if we knew *all* the first principles, we could deduce all objects and events. No self-respecting philosopher would go to the trouble of proving this, and it is certain that Spinoza did not mean to assert so trivial and obvious a proposition. But the dilemma is unavoidable. Either he is limited to that conclusion, or he must be charged with attempting to override his own logic — with seeking to find an argument for an absolute deductive system by condemning the deductive method itself.

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[1] On the ground that all the components of the universe must be somehow 'related.' That relation does not imply dependence and unity, is the contention of 'pluralism.' The issue is discussed below, pp. 242–246.

Thus the proof of absolutism fails through the fact that neither teleology nor deduction defines an absolute maximum or ideal. And this failure is fraught with serious consequences. For in order to prove the necessity of 'absolute' knowledge, the *actual* instances of knowledge are virtually discredited. In other words, the procedure of absolutism involves more than inconsistency and failure — it involves *agnosticism*, that is, the denial of positive knowledge, and the substitution for it of an unrealized project. It encourages the sweeping condemnation of science, and an irresponsible and autocratic procedure in philosophy.

Such, then, was the state of absolutism at the time of Kant. Ambitious in the interests of the speculative dogma to formulate an all-general and all-sufficient principle, it neglected the essential formality and abstractness of logic (the discovery of which was its great achevement); it violated the meaning of ethical, physical, and other conceptions by over-generalizing them; and disparaged actual knowledge by arbitrarily asserting a problematic conception of ideal knowledge. We have now to consider whether modern idealism, profiting by the insight of Kant[1] has succeeded in avoiding formalism, equivocation, and dogmatism.

§ 5. There is, as we have seen, a merely 'critical' as well as a metaphysical, Kantianism.[1] A critical or strictly logical Kantianism commends that philosopher for his rediscovery of the categories, and for his contributions toward their complete formulation and systematic classification. If this interpretation be set aside, as having no necessary connection with the idealistic metaphysics, only one alternative remains. If Kant's originality does not lie in the formulation of the category of synthetic unity, then it must lie in the contention that this and other categories are *supplied or enacted by consciousness*. And in this contention metaphysical idealists of all schools are virtually agreed.[2]

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[1] Inasmuch as 'absolute idealism' is identified with *objective* idealism — it develops from Kant, rather than from Berkeley.

Transition to Absolute Idealism. The Absolute Cognitive Consciousness

We are now concerned, not with the merits of this contention, but with its bearing upon absolutism. United with absolutism it gives rise to the philosophy known as 'absolute idealism.' Reality is defined in terms of an *absolute cognitive consciousness*, that is both prior to things known, in the idealistic sense, and also a maximum or ideal, in the absolutist sense. The Absolute Good of Plato, and the Infinite Substance of Spinoza, are thus replaced by the "Absolute Idea" of Hegel; and by such contemporary conceptions as Professor Royce's "absolutely organized experience inclusive of all possible experience," or "the *absolute* self-fulfilment, *absolutely* self-contained significance" of the "one *and only one*" ideal experience, described by Mr. Joachim.[3] Let us inquire, then, whether idealistic absolutism, such as this, escapes the formalism, equivocation and dogmatism of earlier absolutism.

Formalism in Absolute Idealism

§ 6. The absolute idealist, like the pre-Kantian absolutist, necessarily turns to those properties of things which have the maximum of generality. Like his forerunners, he depends for the definition of his universal principle upon the *logical*

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[1] See Chap. VII, § 5.

[2] See above, pp. 154–156.

[3] J. Royce: *Conception of God*, p. 31; H. H. Joachim: *The Nature of Truth*, p. 78.

categories. And his universal consciousness must again be defined exclusively in terms of these categories, *since no other attributes will measure up to its unlimited generality.* The Kantian category which has assumed fundamental importance is, as we have seen, that of synthetic unity, or systematic totality. The absolute consciousness, then, is that which contributes to all things, by the thinking or the willing of them, those determinate interrelationships by virtue of which they form a consistent and orderly universe. The world is one systematic whole, thought or willed.

Now such is the power of words that this rings like an important conclusion. And yet it explains so little that a scientist, moralist, or religious believer would be justified in conceding it without hesitation. For as respects the issues of science, morality, even of religion, it is utterly noncommittal; it is consistent with *anything*. When the idealist proceeds further, and enumerates certain subordinate categories, such as difference, identity, quality, etc., wherewith the absolute consciousness effects this union of things into a systematic whole, he has to reckon with the logician, but he can still be safely ignored by everyone else. In other words, if consciousness is to be generalized, it must be defined in logical terms; and when so defined it serves to explain the logical elements of experience, *and nothing more.* To explain the other aspects of experience, one must look to other, and, as will inevitably be the case, less general principles.

It is significant that idealism loses its pragmatic value, its fruitfulness of application and pertinence to life, in proportion to the refinement of its logic. There was a time when idealists believed that *the specific characters of spirit* could be assigned a universal logical value, and so be attributed to nature and history. But there has been a growing tendency to abandon the logic of spirit; and to accept, on the one hand, some general formal category such as of 'relation,' 'unity,' 'coherence,' etc.; and, on the other hand, the special categories of the sciences *as they stand*. In thus formalizing and neutralizing their universal principles, idealists have bettered their logic, but at the expense of their metaphysics. The old-inspired idealism of art, literature, and life, the idealism that made a difference, has been discredited by idealists themselves.

Thus the weakness of Hegel, from the later idealistic point of view, lies not in his general programme, but in the fact that he boldly set about carrying it out. He made too many positive assertions. The fact that Hegel *did* make positive assertions about natural evolution, about historical development, and about international politics, accounts for the fact that his philosophy was of vital human consequence, and to many a source of inspiration. But today no one is more ready than the idealist to point out that Hegel made the mistake of forcing 'psychological' categories upon nature and history. He tried to deduce the actual cosmic process from the laws of spirit; and it is now generally conceded that he failed. Everyone but the idealist explains his failure by the falsity of the project itself; but he attributes it to the fact that Hegel's categories of spirit were not *purely logical.*

The new way is to identify spirit with 'synthetic unity' in general; and, for the rest, with things as they are.[1] Then, if you require more definite information you must wait until scientists, historians, and others discover what things really are. But this is what the world has long since been doing anyway. The only advantage the idealist enjoys is the hope that some day, when the returns are all in, he may rise triumphantly and say — "*That* is the Absolute Spirit." But meanwhile he must wait like the rest of us, or himself engage in the lowlier task of studying nature and life.

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[1] Or with things as they are not! For Mr. Bradley, who discredits all the special categories of science, the valid special categories must remain problematic; cf. above, pp. 101, 150. Cf. in this connection, McTaggart: *Studies in Hegelian Dialectic*, Ch. VII, *passim.* Admitting that Hegel's philosophy of nature and history cannot be sustained, the author says: "The practical value of the dialectic, then, lies in the demonstration of a general principle ('the abstract certainty which the Logic gives us that all reality is rational and righteous'), which can be carried into particulars or used as a guide to action, only in a very few cases, and in those with great uncertainty." (pp. 255, 256.) Cf. also, above, pp. 148–150.

An analogous case is presented by the gradual devitalization of the Fichtean and Romanticist tendencies. One would scarcely expect an orthodox neo-Fichtean to preach a national uprising. Carlyle and Emerson would find little to their taste in present-day accounts of the "over-individual will." And the reason lies in the fact that the absolute will has gradually been reduced to a will that things shall be as they are, or rather to the will through which things are as they are. It was once supposed that the primacy of the will, or the creative originality of genius, had something to do with a man's power over his environment. Idealism was the justification of the religion of self-reliance. As an idealist a man might substitute his affections for the alien categories of mechanical science, and discern behind the hard outer aspect of nature a response to his own longings. He might assert himself, and yet claim the world as his own. Idealism was the justification of faith in the triumph of the human spirit over its adversaries — the triumph of the individual over authority, of the nation over its conquerors, of humanity over fate.

But this moving idealism is now condemned for its anthropomorphism. Its claims were so specific that they were exposed to refutation. The universe is not necessarily responsive to any historical individual interest. If, then, 'will' is to be retained as the originating condition of being, it cannot be your will or mine, for these prefer special claims which events in their neutrality are not disposed to regard; it must be an "over-individual will," whose essential character is that it shall will things as they are — whatever they are.

"Cannot my will," asks Professor Münsterberg, "aim at the realization of an end which does not appeal to my personal interest, but which I will because I enter into the willing and feeling of the independent world, and because I feel satisfied if its purpose becomes realized? All this is possible, it is clear, only if two conditions are fulfilled: the objective world must have a will of its own, and its will must force itself upon me and must thus become my own desire." In other words, there is one fundamental act of will, the "demand that there be a world." The rest follows as a matter of logical necessity and empirical fact. "For everyone who wants to have a world at all, all the relations which result from the self-assertion of the experiences must be acknowledged as absolutely valid for the true world." [1]

But how does such a "self-assertion of the world" differ, save in name, from that very impartiality or indifference from which the romantic faith is popularly supposed to have promised deliverance? One is reminded of Heine's description of Catholicism as "a concordat between God and the devil — that is to say, between the spirit and the senses, in which the absolute reign of the spirit was promulgated in theory, but in which the senses were nevertheless practically reinstated in the enjoyment of their rights." [2] Similarly, modern Fichteanism of the more rigorous type, under the influence of logical and scientific motives, has virtually reduced will to an endorsement of necessity and fact. The "pure will," "the only 'a priori' for the true world," is the "will for identities." [3] In other words the formal principle of 'identity' as the supreme logical category, and the principle of order in science, is virtually all that is left to define the meaning of spirit.

The 'eternity' or universality of value is thus conceived so formally, as not to affect the really significant moral and religious issues. Among the values for which men actually contend, absolute idealism guarantees the ultimate conservation of but one, the logical value of a world-order. The attempt to invest will with the universality of logic has led to *the reduction of will to logic.* But a will so conceived, while it may claim universality, must be insufficient and indeterminate with reference to life.[1]

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[1] *Science and Idealism.* pp. 31–32; *The Eternal Values*, pp. 75, 78.

[2] *Prose Writings*, trans. by Havelock Ellis, p. 155.

[3] Münsterberg, *op. cit.*, p. 79.

Equivocation in Absolute Idealism

§ 7. In spite of the fact that when strictly interpreted absolute idealism succeeds in grounding reality in spirit only through having first reduced spirit to logic, it has nevertheless been offered, and is still offered, as a confirmation of religious belief. This is possible, I am convinced, only by virtue of the suggestive power of terms borrowed from religious tradition, and used without a strict regard for their meaning. In other words, idealism, like pre-Kantian absolutism, appears to escape formalism only by falling into the more serious error of equivocation.

The fundamental equivocation in idealism is its use of terms that ordinarily refer to characteristic forms of human consciousness — such as 'thought,' 'will,' 'personality,' and 'spirit.' Whatever may be true of consciousness in general,[2] *the moral and religious significance of consciousness* is bound up with those very elements which must be eliminated if the conception is to be employed as an unlimited generalization. Thus 'thought' suggests a stage of development in life, a prerogative of man, distinguishing him from the greater part of his environment; but a *universal* thought, an *absolute* idea, must be coextensive with the totality — and exhibited as truly in the mechanisms of nature as in the purposes of man. Indeed, the greater the stress laid on the universality of thought, the more is one compelled to identify it with nature *rather* than with man. The term 'will' belongs inseparably to the assertion of particular interests in the face of indifferent circumstance, and in the midst of other wills that may be friendly or hostile. But an 'over-individual will' must coincide with all particular interests and also with their environment. Its over-individuality is better exhibited in the environment than in the interests themselves. Similarly, "personal self" refers to a coördination of "inner world, fellow-world, and outer world." But Professor Münsterberg, nevertheless proposes to conceive the fundamental principle from which all three are derived, as "selfhood without individuality." "We might suggest it," he writes, "by the words 'over-self.' The over-self is therefore reached as soon as the reference to the personal conditions in our experience is eliminated. On the other hand, as soon as the over-self posits in itself a limited personal self, its undifferentiated content must at once separate itself into a self, a co-self, and a not-self." [1]

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[1] Cf. also, above, pp. 151, 152. The 'eternity' of value may be taken to mean that true judgments of value, like other true judgments, must have objective validity, or be in some sense independent of the individual judging mind. But this affects neither the question as to *what is valuable*, nor the question as to *whether value shall prevail.* It is thus non-committal both with reference to morals and religion. Cf. below, pp. 335-340.

[2] Cf. Chap. XII.

Now such qualifications as 'over,' 'super,' 'absolute,' attaching to words "by way of eminency," in the majority of cases really *alter their meaning*. But since the words 'thought,' 'will,' and 'self' are none the less retained, the unsuspecting layman not unnaturally understands them in the *familiar sense*, in that sense in which he can verify them in his own experience. The *suggestions* of these and other like terms must inevitably outweigh the technical meaning which they possess in the discourse of idealistic philosophy. The layman is never really taken into the confidence of the augurs. Hence he is readily led to believe that he is guaranteed the triumph of civilization over the mechanical cosmos, and of good over evil. He is persuaded that the Absolute takes sides with him against his foes and promises him the victory. Little does he suspect that such a being must by definition stand uncommitted to any cause, the impartial creator and spectator of things as they are.

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[1] *Op. cit.*, pp. 395, 398. Of all absolute idealists, Bradley most consistently avoids such procedure as this, with the result that his first principle is almost wholly devoid of characters. For his discussion of the self, see *Appearance and Reality*, Ch. X, especially p. 114. An excellent illustration of this procedure is afforded by the conception so much in favor with critical idealists, of a "non-psychological subject." Cf. above, pp. 140, 144, 146.

The most signal equivocation of which idealism has been guilty is its use of the terms 'good' and 'evil.' Equivocation is involved even in the *project* of such a solution as that which idealism undertakes. Evil constitutes a problem because it opposes, retards, or defeats the good will. If evil were not in this sense uncompromisingly alien to good, defined in contradistinction to it, there would be no problem. Now, to solve this problem in the idealistic sense means to discover some way of regarding evil as conducive to good, as 'good for' good, as part of a whole that is better for its presence. But such a project necessarily involves a new definition of good, in which the old good shall be neutralized through the complicity of evil. And this is undeniably the case with every interpretation of the Absolute's goodness that idealism has formulated.[1] Good and evil are united in a new conception of value, the very essence of which is its implication of *both* good and evil. Now assuming that it is possible to formulate such a conception, and to attribute to it the unlimited generality that absolutism requires, it is certainly impossible to call it 'good' without equivocation. For that term will continue to suggest what is now construed as only one of its partial aspects. And the new conception appears to be a solution of the original problem only because of this suggestion. It seems to assert a victory of good over evil, whereas it really asserts only a perpetual and doubtful battle between the two, giving a certain fixity and finality to the very situation from which it promised deliverance.

The same motive which leads absolutism to the equivocal use of words leads it to mysticism. For mysticism is the express admission that the first principle cannot properly be characterized at all. Words can do no more than suggest an experience that lies beyond the reach of their definite meanings. Thus absolute idealists who seek to avoid both formalism and agnosticism, and who, like McTaggart, admit that self, will, and volition all involve relations and limitations that cannot be attributed to an absolute, are prompted to employ some less articulate version of spirit, such as "love." In terms of this dissolving emotion he ventures "to indicate the possibility of finding, above all knowledge and volition, one all-embracing unity, which is only not true, only not good, because all truth and all goodness are but distorted shadows of its absolute perfection—'das Unbegreifliche, weil es der Begriff selbst ist.'"[1]

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[1] Cf. McTaggart: *Studies in Hegelian Cosmology*, Chap VI, especially §§ 182–188. I return to this subject in discussing pluralism. Cf. below, pp. 246–248.

The equivocation into which absolute idealism so readily falls, can scarcely be said to be an accident. It is the result of an effort to escape formalism. If equivocation be strictly avoided, there is no content which can be attributed to the all-general principle, save the abstract and insufficient categories of logic.

Dogmatism in Absolute Idealism

§ 8. We have now to inquire whether absolutism is enabled by the aid of idealism to escape dogmatism. The proof of absolutism depends, as we have seen, on the implication of a maximum of knowledge. It must be supposed that as a curve can be plotted from several points, so a progression can be defined from the several instances of human knowledge. And this progression, thus defined, must be supposed to define a supreme or consummate knowledge as its upper limit.[2] Employing the idealistic principle, and assuming that reality is answerable to the demands of the cognitive consciousness, we may thus attribute to reality the ultimate demand or ideal of the cognitive consciousness.

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[1] *Op. cit.*, p. 292.

[2] "It is involved in the very idea of a developing consciousness such as ours, that . . . as an intelligence, it presupposes the idea of the whole." (Caird: "Idealism and the Theory of Knowledge," pp. 8–9.)

What, when I think, am I virtually postulating as the perfect success of thought? What unlimited cognitive attainment may I infer from the very limitations which I seek to escape? Let me cite two contemporary exponents of the doctrine. "Truth," writes Mr. Joachim, "was the systematic coherence which characterized a significant whole. And we proceeded to identify a significant whole with 'an organized individual experience, self-fulfilling and self-fulfilled.' Now there can be one *and only one* such experience: or *only one* significant whole, the significance of which is self-contained in the sense required. For it is *absolute* self-fulfilment, absolutely self-contained significance, that is postulated; and nothing short of *absolute* individuality — nothing short of *the* completely whole experience — can satisfy this postulate. And human knowledge — not merely *my* knowledge or *yours*, but the best and fullest knowledge in the world at any stage of its development — is clearly not a significant whole in this ideally complete sense. Hence the truth, which our sketch described, is — *from the point of view of the human intelligence* — an Ideal, and an Ideal which can never *as such*, or in its completeness, be actual as human experience." [1]

Or compare the statement of Professor Royce. "In the first place, the reality that we seek to know has always to be defined as that which either is or would be present to a sort of experience which we ideally define as organized — that is, a united and transparently reasonable — experience. . . . Passing to the limit in this direction, we can accordingly say that by the absolute reality we can only mean either that which is present to an absolutely organized experience inclusive of all possible experience, or that which would be presented as the content of such an experience if there were one."[2] Elsewhere, Professor Royce describes this "absolutely organized experience" as "an individual life, present as a whole, *totum simul*."

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[1] Joachim, *The Nature of Truth*, pp. 78–79.

[2] Royce, *The Conception of God*, pp. 30, 31.

"This life," he continues, "is the completed will, as well as the completed experience, corresponding to the will and experience of any one finite idea." And "*to be*, in the final sense," he concludes, "means to be just such a life, complete, present to experience, and conclusive of the search for perfection which every finite idea in its own measure undertakes whenever it seeks for any object."[1]

Now what content do these statements enable us to attribute to the cognitive ideal? Do they mean, for example, merely that it is "inclusive of all possible experience," that it is the knowledge of *everything*? If so, then absolute idealism has done no more than to add to the total reality, whatever it be, a knower that envelopes it. And this throws no light on the *nature* of the total reality; nor is it of any special significance that there should be such a mere spectator of things as they are, *totum simul*.

Or do these statements mean merely that such a knower of everything must enjoy a "completed will," or perfect satisfaction, that is unattainable by the fallible mind of man? If so, then it may be observed that the mere *state* of complete satisfaction is relative and indeterminate. Man *does* experience perfect satisfaction, often when he might better be troubled by a "divine unrest." If it be objected that man's satisfaction, despite its inward self-sufficiency, is nevertheless imperfect, then this must be because his ideals are not high enough. The Absolute experiences the complete satisfaction of the *highest cognitive ideal*. But what, then, *is* the highest cognitive ideal? We can now no longer answer in terms merely of satisfaction. It may be that the highest cognitive ideal is the knowledge of everything, in which case the Absolute is the being that is *perfectly satisfied to know everything*. But such an Absolute, even if there were any ground for asserting it, would be otherwise consistent with any kind of a world whatsoever.

As a matter of fact, neither of these versions of the cognitive ideal makes any use of the absolutist principle proper. They simply employ the cardinal principle of idealism to add to the world as it stands a consciousness that shall support it. Since we must postulate a totality, and since on idealistic grounds things cannot be without being known, it follows that there must be a knowledge to correspond to the totality. But if there is any virtue in the absolutist principle itself, it must be possible to define a cognitive ideal in other than quantitative terms, not a knowing of *everything* merely, but a *perfect* knowing of everything. From what it is to know well, it must be possible to infer what it is to know *best*. And that the Ideal Experience is a maximum in this sense is the really crucial contention of such writers as Joachim and Royce. I have considered other alternatives in order to clear this contention from confusion.

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[1] *The World and the Individual*, First Series, pp. 341–342.

Mr. Joachim's Ideal Experience is "completely self-coherent," and Professor Royce's "absolutely organized."[1] 'Coherence' and 'organization' are not essentially different; and they are equivalent to the Kantian notion of 'synthetic unity.' All three express the same idea that is expressed outside the idealistic school, by the word 'system.' The question now arises as to whether this conception defines a *maximum*. Does it mean anything to speak of *absolute* coherence, organization, or system?

That these expressions seem to mean something is due, I think, to the loose quantitative suggestions of the terms employed. Thus it is fair to say that a living organism is more coherent than a sand-bank, in that there is a greater cross-reference of parts and inter-dependence of function. One gets more light on each element from its relations to all the other elements, in the former case, than in the latter. Similarly, it is possible to suppose an assemblage even more coherent than the living organism. But between this and the supposition of an *absolutely* coherent unity, there is an immeasurable gulf. A coherent whole must contain both relation, connection, and unity, and also an individuality and plurality of parts. And there is nothing in the principle of coherence itself which defines *what proportion* of unity and plurality shall constitute the *ideal* coherence. Thus to insist that the universe must, on general logical grounds, be conceived as a coherent whole, is not really significant, even as repects the unity of the world. Suppose it to be granted that all things must be related. There still remains the question: How far do these all-ramifying relations go toward defining the terms so related? That the terms cannot be wholly defined by these relations is obvious; *nor is there any definite degree of significance that must be attached to them in order to satisfy the demands of bare relational unity.* Grant that the world is some sort of unity in variety, of permanence in change, and the alternatives still range from a vital unity to a loose aggregate.

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[1] Joachim: *op. cit.*, p. 114; Royce: *Conception of God*, p. 31.

It might, I think, readily be proved that this whole procedure involves confusion and error. It is impossible in any given case of knowledge to say: "By this I know, by that I am prevented from knowing; therefore if that were wholly replaced by this, I should know without limit." There is no negative element *in* knowledge, such as plurality, unrelatedness, incoherence, or meaninglessness. There is a negative cognitive element only in so far as I do *not* know, that is, am confused or unaware. The conditions of knowledge are fully satisfied when I know positively and clearly. And from this it is possible to infer only that things are precisely and determinately what they are — a conclusion which does not in the least support either absolutism or idealism.

Thus absolutism is neither more significant nor more valid for its alliance with idealism. The Absolute is now, as formerly, no more than logic makes it — which is much too little to satisfy the metaphysical claims which are urged in its behalf. An absolute defined in terms of the system or unity of the logical categories is doubtless all-general, but too formal or abstract to afford a sufficient explanation of anything. Nor does logic itself yield even a definite ideal which may be postulated, even though it remain problematic.

Summary of Idealism. Idealism and Civilization

§ 9. A complete and rounded idealism contains two principles, the priority of consciousness, and the validity of the speculative ideal. Its central conception is the Absolute Spirit; which, as spirit, conditions the being of its objects; and, as absolute, constitutes the superlative fulfilment of every human aspiration. Waiving the question of its proof, with which we have thus far been mainly occupied, — let us in conclusion summarize its significance as a philosophy of life and of religion.[1]

In the first place, it is to be remarked that idealism is not at heart sympathetic with the modern democratic conception of civilization. Idealism is, it is true, an *idealizing* philosophy. But the ideal which this philosophy glorifies is not the gradual amelioration of life through the human conquest of nature; but rather the perfection that was from the beginning and is forever more. The faith which is most characteristic of today, is the faith in what an enlightened and solidified mankind may achieve, despite the real resistance and incompetence which retard it.[2] The faith which is most characteristic of idealism, on the other hand, is the faith that all things work together for the glory of an eternal spiritual life, despite appearances.

It may seem paradoxical to charge idealism with being excessively individualistic. And yet this has been the case with absolutist philosophies from the beginning. For they emphasize the relation between the individual life and the universal life, and so tend to slight society. Both Plato and Spinoza, in so far as they have affected the fundamental motives of life, have tended to withdraw men from social relations, and unite them directly, through speculation and contemplation, with God. Idealism emphasizes, it is true, the indispensableness of social relations to a developed self-consciousness; but the socialized self is only a step toward the realization of that absolute self in which a man is encouraged to find his true sphere and only genuine reality.[1] And as idealism tends to be out of sympathy with the current notion of human society as the working force of the spiritual life, so it tends to discredit the complementary notion of *progress*, as the measure of work done. Idealism does, it is true, emphasize historical development, but of the sort in which the value attaches to the progress itself rather than to the result; and in which the merit of historical achievement is apparent rather than real. "The consummation of the infinite End," says Hegel, "consists merely in removing the illusion which makes it seem yet unaccomplished. The Good, the absolutely Good, is eternally accomplishing itself in the world; and the result is that it needs not wait upon us, but is already by implication, as well as in full actuality, accomplished."[2]

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[1] What follows may be compared with a similar summary of pragmatism; cf. Ch. XI, § 7.

[2] See above, p. 5.

The Universalistic or Leveling Tendency in Idealism

§ 10. In the course of his well-known indictment of idealism, Mr. Hobhouse writes as follows: "Indeed, it is scarcely too much to say that the effect of idealism on the world in general has been mainly to sap intellectual and moral sincerity, to excuse men in their consciences for professing beliefs which on the meaning ordinarily attached to them they do not hold, to soften the edges of all hard contrasts between right and wrong, truth and falsity, to throw a gloss over stupidity, and prejudice, and caste, and tradition, to weaken the bases of reason, and disincline men to the searching analysis of their habitual ways of thinking." [1]

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[1] Cf. Royce: *Studies of Good and Evil*, "Self-consciousness, Social Consciousness and Nature." There is an idealistic school which has attempted to deny this; cf. *Personal Idealism*, edited by H. Sturt; and G. H. Howison: *Evolution and Idealism*. That this position is on strict idealist grounds untenable, is, I think, proved by Professor Royce's successful refutation of it; cf. the discussion between Professor Royce and Professor Howison in Royce: *Conception of God*. A personal idealism or "humanism" based on pragmatist grounds, is another matter; cf. below, pp. 261 ff.

[2] *Encyclopädie*, § 212, trans. by W. Wallace, *Logic of Hegel*, pp. 351–352.

In reply, Professor Henry Jones puts his finger, I think, on the real point of the accusation. "In refusing to admit differences which are absolute, in reducing all differences into relative differences, or differences within or of a unity, Idealism must seem to the ordinary critic, with his one-sided way of thought, to render them of no account." The critic "will have every question answered by a downright 'Yes' or 'No.'" [2] He objects, in other words, to the universalistic or leveling tendency in idealism. He claims that through his assertion that things find their real meaning only in the unity of all things, the idealist virtually overrules the flat differences and uncompromising oppositions that guide the empirical and practical intelligence.

And this accusation is, I think, substantially just. Idealism does not, it is true, attribute *equal* significance to all things; but it does attribute *necessary* significance to all things. It is essentially the all-saving philosophy, as opposed to the philosophy of extermination. It encourages the supposition that a profounder insight would reinstate what ordinary discrimination rejects out of hand. It rises above the plane of distinctions, and invites attention to the broad synthetic features of the world. This universalistic tendency in idealism accounts, I think, for the significant fact that idealism has contributed little or nothing to the solution of special problems, such as the relation of mind and body; and for its comparative lack of interest in special empirical discoveries, such, for example, as those of modern psychology. But it also accounts for the much more significant fact that idealism does not really touch those special issues with which religion is concerned.

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[1] L. T. Hobhouse: *Democracy and Reaction*, pp. 78–79. For reference and comment, cf. John Morley: *Miscellanies*, Fourth Series, pp. 261, sq.; James: *A Pluralistic Universe*, II; and Henry Jones: *The Working Faith of the Social Reformer*, Ch. VII, VIII.

[2] Henry Jones: *op. cit.*, pp. 218, 208.

Thus, the religious belief in immortality arises from a solicitude that is specific and unmistakable. Its root is the dread of annihilation, of the severance of ties and the cessation of activities that are presently good. Immortality is a prerogative by virtue of which man hopes that he may continue thus to live, after that natural-historical event called death. Idealism assures a man that his life, whether long or short, is a "unique embodiment of purpose."[1] By virtue of the world-sustaining thought or will, he belongs to a timeless unity, within which he has a determinate relation to all other things! It is doubtful if such doctrines would be recognized as even remotely relevant to the religious issue, were they not expressed in such phrases as "the eternal life." In any case, after the idealist has offered his consolation, the real object of hope and fear — man's chance of life *after* death remains in as great darkness as before.

Similarly, the religious belief in God relates to specific good things of which God is the guarantee. But for idealism, God is "the unity and the spiritual purpose of the world," where "spiritual purpose" is above the petty differences and blind prejudices of this mundane life. God is that "richer, purer, completer selfhood," in which the temporal illusion is dispelled, and which when a man attains it by a "maximizing of life," "elevates his disposition beyond immediate or finite interests."[2]

As a version of God, such a philosophy deserves the comment which it has recently received from a theologian. "As one contemplates the idea of the timeless Absolute in its strict meaning—and especially as one regards it from the standpoint of the ethical life with its constant activity in the production of spiritual goods — it loses all power to call forth our worship, and appears like a huge spherical aquarium encompassing within itself motion and life, but as a whole rigid, glassy, and motionless. Surely the timeless Absolute is not the supreme solver of human problems, nor the God to whose worship we should summon the aspiring and struggling sons of men."[1]

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[1] Royce: *The Conception of Immortality*, p. 49. Cf. Münsterberg: *The Eternal Life*, *passim*. For the admission that the religious implications of idealism are "almost entirely negative," cf. McTaggart: *Some Dogmas of Religion*, p. 291.

[2] H. Jones: *Idealism as a Practical Creed*, p. 296; R. M. Wenley: *Modern Thought and the Crisis in Belief*, pp. 304, 308, 310.

For the religious consciousness, if we except alone the state of mystical contemplation, God is the will through which the universe shall in the end prefer happiness to misery, good to evil, life to death — and thus carry through to some eventual triumph the adventure in which man is presently engaged. Religious hope and fear, like all hope and fear, are discriminating. They issue from the love of some things and the dread of other things. The believer looks to God for a boon, knowing well the sweet from the bitter. Hence the assurance that things are one, eternal, both infinitely rich and also orderly and coherent, — even the assurance that as such they are thought or willed, leaves him unmoved. He must know incomparably more before, in his religious perplexity, he knows anything.

The Virtue and the Extravagance of Idealism

§ 11. Conceding the utmost claims of its critics, idealism is to be credited with two substantial contributions to contemporary thought, the proof of the fundamental validity of logic, and of the independent rights of moral science. Through its insistent promulgation of these truths, idealism has won a fair and a decisive victory over naturalism. Indeed, during the last century, idealism has almost alone defended the citadel of religious philosophy from this most powerful and vicious adversary.

And the failure of idealism is very closely related to its success. The source of its failure lies in the *extravagance* of the claims which it has made for those branches of knowledge which it has successfully vindicated. For idealism has sought to prove not only the universality but also the spirituality of logic; it has sought to prove not only the independence of moral science, but its logical or universal character as well. And the result has been to confuse logic, and to formalize life. The extreme claims of religious faith cannot be asserted without a contradiction of the very motive from which faith springs. Spirit so generalized as to coincide with the totality of things has lost its savor. Such an utter consummation of hope is possible only by the abandonment of those particular values for which hope was first entertained. One who demands the possession of the world must be satisfied with the grim and ironical religion of last resort: the promise that the world shall be his who asks of it only that it shall be itself. This — the religion of renunciation — is compatible with any philosophy, and most of all with those philosophies which deny men's first hopes. And if one is to have a religion of renunciation, it is better that the lesson of disillusionment should be taught without the creation of fresh illusions. If the first hopes are to be abandoned, it is better also to abandon the language in which they are traditionally expressed; or openly to profess that such language is employed only in a poetic and devotional sense, to make men brave and without complaint in a merciless environment.

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[1] E. W. Lyman: *Theology and Human Problems*, p. 21.

But renunciation is not the only religious implication of philosophy. There is good ground for hope, provided only that hope does not defeat itself through the very extravagance of its claims; through denying the very fears that gave it birth, and seeking to make peace while the enemy is still in arms.

PART IV

PRAGMATISM

CHAPTER IX

THE PRAGMATIC THEORY OF KNOWLEDGE

The General Meaning of Pragmatism

§ 1. It is characteristic of pragmatism that it does not readily lend itself to summary definition. It can neither be identified with a fixed habit of mind, as naturalism can be identified with the scientific habit of mind, nor can it be reduced to a single cardinal principle, as can idealism. We are as yet too much in the midst of it to discern its general contour; indeed it is not so much a systematic doctrine as a criticism and a method. Nevertheless, it is not impossible, I think, to give a preliminary characterization of it that shall be roughly true, and shall serve as a guide to the study of its diverse aspects. Pragmatism means, in the broadest sense, *the acceptance of the categories of life as fundamental*. It is the *bio-centric* philosophy. And it must be added at once that the pragmatist means by 'life,' not the imaginary or ideal life of any hypothetical being, not the "eternal" life or the "absolute" life; but the temporal, operative life of animals and men, the life of instinct and desire, of adaptation and environment, of civilization and progress.

Although the pragmatic *movement* is new, pragmatism is, as James acknowledges, "an old way of thinking." It is dangerous, however, to identify contemporary pragmatism too closely with any of the earlier doctrines that resemble it. Thus the whole 'experimentalist' tendency in English science and philosophy may be said to have anticipated the pragmatist theory that truth is achieved by the *trying of hypotheses*. And Hume suggested at the close of his *Treatise* that we must be satisfied in the end with a belief that is suited to action.[1] But these anticipations of pragmatism are largely accidental, and more negative than constructive.

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[1] Cf. above, p. 139.

On the other hand, Kant, and the Fichtean idealists after him, maintained "the primacy of the practical reason." Pragmatism is doubtless related to this and other traditional forms of voluntarism. But from the idealistic form of voluntarism, at least, pragmatism is sharply distinguished by its naturalistic and empirical leanings. Pragmatism does, it is true, depart from naturalism in so far as this assigns the fundamental place to the mechanical categories. Pragmatism would insist on the priority of biology to physics; or at least upon the right of biology, together with the moral and social sciences, to regard the teleological method as independently valid. For if it can be argued that the processes of life may be described as quantities of mechanical force or energy, it can equally well be argued that energy and force themselves are instruments which serve the uses of life. But while pragmatism is opposed to a fundamental or universal mechanism, it has much in common with naturalism. It may even in a sense be called 'naturalistic.' For it identifies reality with "this world," with the sort of thing that is going on here and now; and regards perception as the most reliable means of knowledge.[1]

The polemic of pragmatism is mainly directed, not against naturalism, but against idealism; and not against the cardinal or subjectivistic principle in idealism, but against idealism as the contemporary form of absolutism. The perfect antithesis to pragmatism is Spinoza, and it is the perpetuation of Spinozism in objective and absolute idealism that is the real object of the pragmatist attack. Absolutism is other-worldly, contrary to appearances; pragmatism mundane, empirical. Absolutism is mathematical and dialectical in method, establishing ultimate truths with demonstrable certainty; pragmatism is suspicious of all short-cut arguments, and holds philosophy to be no exception to the rule that all hypotheses are answerable to experience. Absolutism is monistic, deterministic, quietistic; pragmatism is pluralistic, indeterministic, melioristic. That which absolutism holds to be most significant, namely, the logical unity of the world, is for pragmatism a negligible abstraction. That which for absolutism is mere appearance — the world of space and time, the interaction of man and nature, and of man and man, is for pragmatism the quintessence of reality. The one is the philosophy of eternity, the other the philosophy of time.

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[1] See below, pp. 363–366.

The Pragmatist Conception of the Theory of Knowledge

§ 2. Pragmatism like all contemporary philosophies is first of all a theory of knowledge. It is in the application of the vitalistic or bio-centric method to knowledge that all pragmatists are agreed. We may hope to discover here a body of common pragmatic doctrine from which the various pragmatisms diverge.

The pragmatist has a characteristic way of setting the problem. In the first place, he means by knowledge a process, and not merely a product. The term knowledge is often used to mean *what is known*, in other words, completed knowledge, or science; and epistemology has been taken to mean the analysis of such completed knowledge with a view to discovering its universal principles or its underlying ground.[1] With pragmatists, however, knowledge means *knowing:* a complex event, involving an individual knower, a something to be known, certain means of knowing it, and then, finally, the cognitive achievement or failure. Critics of pragmatism have attempted to dismiss this method of studying knowledge by calling it 'psychological,' rather than 'logical.' It is certainly not exclusively logical, because it takes into account the circumstances and agencies of knowledge, and not merely its grounds. But, on the other hand, it is not psychological in any limited or disparaging sense, because it seeks to distinguish the cases of *true* knowledge from the cases of *false* knowledge. In short, it is both psychological and logical; and for the reason that both psychological and logical factors enter into that particular complex which we call knowing.

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[1] This is on the whole the idealistic conception of 'the categories.' Cf. above, pp. 139–142.

Regarding the whole of the concrete process of knowing, pragmatism finds that its form is practical. In its native habitat, where the pragmatist seeks it out and observes it, knowing is a phase of life, of action in an environment. This holds equally of the kind of knowledge that is ordinarily called 'practical,' and the kind that is ordinarily called 'theoretical.' Whether it be the execution of a policy, the calculation of the price of a commodity, the investigation of the properties of non-Euclidean space, or the demonstration of the attributes of God, knowing is always an enterprise, projected on a particular occasion, tried with particular means, attended with hope or fear, and concluded with success or failure. This is the subject-matter with which the pragmatist theory of knowledge primarily deals. And there are two problems which the pragmatist makes both prominent and fundamental: first, what is the rôle of ideas in knowledge? second, what is the difference between a true idea and a false idea?

The Rôle of Ideas in Knowledge

§ 3. To understand the pragmatist theory of the rôle of ideas in knowledge, it is necessary to insist on the interpretation of knowledge which has just been given. The theory applies only in the cases where the full panoply of knowledge is present. And in particular there must be a having of ideas about something, where the ideas and the thing are in some sense different. In other words, we have here to do exclusively with reflective knowledge, what James calls "knowledge about" as distinguished from "knowledge of acquaintance." Professor Dewey would not regard the latter as knowledge at all, but would insist upon "an element of mediation, that is, of art, in all knowledge."[1] While it will be necessary presently to inquire into these implied reservations, we shall do well for the present to exclude them. Just what, then, is meant by an 'idea,' in the sense in what we are said to have ideas *about things?*

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[1] John Dewey: *Influence of Darwin on Philosophy, and other Essays*, p. 80.

The pragmatist answers, first, that an idea is whatever exercises the function of 'meaning.' In other words, there is no peculiar quality attaching to an idea as such — but only an office.[1] Anything may be an idea, provided you mean with it; just as anything may be a weapon, provided you do injury with it. The commonest instance of an idea is probably a verbal image, and there is no visible or audible form that may not serve as a word.[2] An idea *is*, in short, what an idea *does*.

But what is this function of 'meaning,' which defines an idea? The pragmatist answers that meaning is essentially prospective, that it is a plan of action terminating in the thing meant. More specifically, an idea means a thing when it projects a series of acts that would, if carried out, bring that thing into the same immediacy which the idea itself already enjoys.[3] Thus when I utter the word "cold," this verbal sound is so connected with a temperature quality that were I to follow up the connection, I would sense coldness. I may be said to have such a plan or incipient train of action without actually executing it — just as a traveller may be said to have a destination even though circumstances should prevent his arriving at it. An idea is like a railway ticket which will take you to a distant place, though you should never make the journey, or like a bank-note which has a cash-value though you should never redeem it. And like bank-notes, ideas are negotiable; they may be themselves used in place of currency for purposes of reasoning or communication. The virtue of ideas thus lies primarily in their *being practical substitutes for immediacy*.[4]

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[1] James: *Meaning of Truth*, pp. 30–31.

[2] Indeed the idea need not perhaps be an image at all.

[3] James: *op. cit.*, pp. 43–50; Dewey: *op. cit.*, p. 90.

[4] James: *op. cit.*, p. 110.

But in order fully to grasp the pragmatist theory of the function of ideas we must inquire concerning their place in life at large. We have found that an idea is an instrument of meaning, that its function is to *mean* something other than itself. But what is the use of meaning, what is the function of the ideational process itself? The answer is apparent when it is observed that immediacy is not sufficient for purposes of action.

For one thing, only a part of the presented field of experience is pertinent to a particular action. It is necessary to *construe* each situation; that is, to select from its wealth of detail that aspect which relates to the matter in hand. Ideas are in this sense 'modes of conceiving' the given, a 'taking it to be' this or that. Discursive thought interrupts 'the continuity of habit' when a doubtful or ambiguous situation presents itself, which the organism has no ready-made way of meeting. In other words, when one doesn't know what to do about it, one thinks about it. Such an occasion constitutes one of those "particular crises in the growth of experience" to which, according to Dewey, thought is always relative. On such an occasion the idea is the "instrument of reconstruction," which delivers the agent from his predicament. The situation being reconstrued, life runs smoothly again on the new basis.[1] Thus to ideate experience, to think it, is to represent it in some special and suitable light.

Again, the ideational process makes it possible to act on the remote environment, on things that lie beyond the range of the individual's sensibilities. Ideal substitutes for these things, ideas that mean them, may serve as well; so that man may be said to live actively not only in the world he perceives, but in the limitlessly extended world he knows *about*. And finally, by means of ideas it is possible to unite range with compactness. Thus the formulas of science put man in touch with the immense expanse of nature, without overwhelming and bewildering him, because they represent it through its constant features. Their bulk is as small as their meaning is great.

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[1] Dewey: *Studies in Logic*, p. 20; A. W. Moore: *Existence, Meaning, and Reality* (Chicago Decennial Publications), p. 16.

This, then, is the pragmatist theory of the instrumental function of ideas. The theory puts a double emphasis on the pragmatic character of thought. An idea is defined pragmatically, as a virtual access to an immediate experience of that which it means. And the whole process of ideation is again defined pragmatically, as the means of acting on the environment.

The Meaning of Truth

§ 4. When we turn to the pragmatist theory of truth, which in English-speaking countries is regarded as pragmatism's most notable contribution to philosophy, we find it again necessary to set the problem with some care. I have placed this theory second in order of exposition because it is properly to be regarded as the sequel to the instrumental theory of ideas.

In the first place, the pragmatist is talking about the kind of truth that is humanly attainable, lying within the individual thought process itself. He not improperly insists that if truth is to be conceived in hypothetical or ideal terms, then this conception itself must be true for the thinker who constructs or defines it. Thus if one asserted that truth attaches only to the thinking of an absolute knower or to an absolute system of thought, then this assertion itself would be in some sense true for the finite philosopher who maintained it. And it is this latter sense of the term with which pragmatism has to do — not the truth of God's knowledge, but the truth of my knowledge of God.[1]

In the second place, truth for the pragmatist is invariably an adjective of ideas; and by ideas he means not Platonic essences, but the modes of an individual's thinking. When are ideas, in this sense, true? What is the nature of *knowing truly?* Like all forms of practice, thinking, believing, or the forming of ideas is essentially fallible. There is a right way and a wrong way. What on any given occasion distinguishes the right way of thinking from the wrong way? When is an idea 'a good idea,' and when is it a 'bad' one? It is evident that you have not solved the problem of truth in the pragmatist sense until you have also solved the problem of error. For pragmatism, in short, truth does not mean the same thing as reality or existence, but is a property, exclusively, of that instance of existence which we call 'idea' or 'belief,' in its relation to that second instance of reality or existence which we call 'object' of the first. Truth is a property of ideas as these arise amid the actual processes of human thinking; it is something which happens to ideas in the course of their natural history. And since ideas have a function, which they may or may not fulfil, truth is one of two opposite fortunes which may befall ideas, the other being error.

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[1] Cf. below, pp. 242–243.

We are now in a position to frame the pragmatist definition of a true idea. *An idea is true when it works;* that is, *when it is successful, when it fulfils its function, or performs what is demanded of it.* An idea is essentially *for* something; and when it does what it is *for*, it is the 'right' or the 'true' idea.

Lest this should seem more obvious than important, it should be contrasted with the view that has been commonly held both by philosophers and common sense. According to that view the truth of ideas lay in their resemblance to their objects. Ideas were regarded as copies, pictures, replicas, true in proportion to their likeness. Pragmatism, on the contrary, insists that a true idea need not resemble its object at all, precisely as a word need not resemble what it denotes; if there is resemblance, it is accidental and negligible so far as truth is concerned. The truth of an idea lies not in the present relation of similarity, nor in any present relation whatsoever, but in the practical sequel. If, in relation to the motive which prompted me to form it, my idea succeeds, the inciting interest being satisfied, my idea is true. Ideas are essentially instruments, and not images; and the proof of the instrument is in the using. The particular kind of excellence proper to this particular kind of instrument is called 'truth.'

Modes of Verification. Verification by Perception and by Consistency

§ 5. So much for the pragmatist theory of truth stated in the terms common to all pragmatists. We must now pass on to sharper distinctions, and to the ambiguities, doubts, and criticisms to which these distinctions give rise. The success or truth of the idea is relative to its use, and the verification of it consists in successfully using it. But there are various uses which ideas may serve. Are we to regard all of these uses as equally germane to an idea's truth? I may, for example, be induced by various motives to form an idea of my future state in the life after death. Such an idea may serve the purpose of preparing me for what I am going to see, or for what I am going to be called upon to do. Such an idea may console me for the loss of friends, or it may be demanded by the logical implications of my philosophical system. Suppose these tests conflict. Can I discriminate among them as respects priority? Or shall I attach equal weight to all, and determine the truth of my idea by the general preponderance of utility? I find no clear answer to this question in the writings of pragmatists. All four of these tests, and possibly others, are recognized as valid; and the choice from among them would seem to be not infrequently governed by the exigencies of controversy. In order to bring out more clearly the difference between these truth-tests or modes of verification, I shall invent names for them as follows: *verification by perception*, *consistency*, *operation*, *sentiment*, and *general utility*.

Verification by perception, is simply the following up of the meaning of an idea. An idea means something, as we have seen, when it is so connected with something as to lead to the presentation of it. The idea must be a sort of handle to the object, a means of recovering it. And when I try my idea by using it to recover its object, I verify it in this first sense. It is true if the perception is what the idea calls for, or what the idea leads me to expect. Thus having an idea of my future state means having something now in mind (it may be no more than a verbal complex) that is so related to my environment as to conduct me to a certain locus in experience; and it is a true idea in proportion as it prepares me for the perception which would there greet me. To verify my idea in this sense would be to follow its lead into this perceptual presence, and so test my preparedness. A shock of novelty and surprise would prove the untruth of my idea; a sense of recognition would indicate its truth.[1]

Verification by consistency, is the testing of the idea on trial, by ideas already in good and regular standing. The idea is proved true by this test when it is not contradicted by other ideas, or is positively implied by them. Thus my idea of my future state is proved by this test in so far as it is not contradicted by the accepted physiological theory of death, or is implied by the accepted theory of the nature of the soul.

Now verification by perception and by consistency evidently stand apart by themselves. They correspond to the traditional criteria of empiricism and rationalism. In restating them pragmatism has simply pointed out that in both cases verification is a series of acts, governed by motives, and terminating in success or failure. Furthermore, pragmatists such as James regard these two modes of verification as the strictly "theoretical" tests of truth. They may not in any given case be sufficient, but so far as they go they have a peculiar validity. "Between the coercions of the sensible order and those of the ideal order our mind is thus wedged tightly." The formation of ideas that shall be determined by these two "coercions" is the cognitive interest in the narrow sense. Such ideas have a "subsequential utility" — that is, they may be usefully employed by other interests; but they get their original verification from perception or consistency. And "sometimes alternative theoretic formulas are equally compatible with all the truths we know, and then we choose between them for subjective reasons."[1] But there remains an important difference between the grounds of the validation of the alternatives, and the grounds of the validation of such a choice from among them. All this strongly suggests that it might be clearer if the term 'true' were restricted to ideas verified in one of these ways — by perception or by ideal consistency. "Subsequential utility" and "subjective reasons" would then remain as extra-logical grounds of belief. One might readily agree that truth in this narrower sense was an insufficient criterion, that the exigencies of life required belief in excess of proof. But the stricter truth tests would not be confused nor their priority compromised. The virtue of such a course will become more apparent as we proceed.

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[1] For similar examples, cf. James: *op. cit.*, pp. 33, 104.

Verificaton by Operation and by Sentiment

§ 6. By 'verification by operation' I mean the same thing that James means by "subsequential utility." Or to employ another distinction made by the same author, I mean verification by "active" rather than "passive" experience.[2] Thus my idea of my future state is verified in this sense in so far as the plans which I base on it succeed. Such would be the case, for example, if I were to receive my reward in heaven for sacrifices deliberately made in this world.

Pragmatism has rightly insisted upon the relation of cognition to collateral interests. That there is always some such relation no one will be disposed to deny. The cognitive interest is one of the functions of a complex organism, and has developed because of its organic usefulness. Whatever is known is available for any uses of which the organism is capable; it can be felt, acted on, talked about, written down, thought about, or dealt with in any of the other ways characteristic of human life. Mr. Schiller goes to unnecessary lengths to show that there are no useless truths. His conclusion could be drawn at once from the unity of the psychophysical organism; the sensory, associative, affective, and motor elements in human nature all contribute to a more or less common fund of resources. And one may easily go farther, and show that the solidarity of society and the ready means of communication and intercourse, make these resources available for humanity at large. But this is very far from a proof that truth *consists* in such uses. They are involved because of the organic and social connections of the truth-seeking function; but truth would not cease to be truth if some organic or social abnormality were to make it impossible to use it. As a matter of fact, since the development of scientific method it has been customary to reach truths by the theoretical means above described, and to regard their truth as established quite independently of the uses to which subsequently they may or may not be put.

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[1] James: *Pragmatism*, pp. 211, 217; cf. pp. 216–217; *Meaning of Truth*, pp. 206 sq.

[2] *Meaning of Truth*, p. 210.

The issue is somewhat confused by the fact that, entirely apart from the process of verification itself, many truths are practical in their subject matter. The cognitive interest, originally in bondage to the organism, is most urgently concerned with what may be called *truths of use*. The most immediately important truths, the cash truths, so to speak, are answers to questions of this form: What will happen to me if I do *a* to *b?* Truths of physical science are largely of this order; and it is natural to regard these as generally typical because of their bulk and urgency. But it will be observed that truth is here made, not by the practical sequel to the theory, but by embracing the practical sequel within the theory, and then testing the whole by 'perception.' If I find that *c* will happen to me if I do *a* to *b*, I am experiencing the nature of a temporal circuit, including terms belonging both to the environment and to my own body. Experiment is here not an external practical test, but the living through, the direct serial experience of, a set of connected events.

It is proper to ask, then, whether verification by operation is an independent test of truth. For it would appear to be either the employment of truths already established by our two former tests, or only a special form of these tests. Let me quote an example from Professor A. W. Moore. "The idea of an ache as the ache of a certain tooth is true, if an operation on the tooth alters the ache."[1] This verification can be construed in one of two ways. On the one hand, the judgment 'such a tooth is aching' is verified by observing the localization of the ache, or by inference from the diseased character of the tooth. The latter would, I should suppose, be regarded as in the last analysis the most reliable test; and both would fall under one or the other of the strictly theoretical criteria above described. And whether one thereupon has the tooth pulled, or not, would not affect the truth of the judgment so verified. The truth would be useful, but its usefulness would be a secondary and irrelevant circumstance. Or, on the other hand, the judgment "were I to have this tooth pulled, the pain would disappear" is verified by observing the sequence *tooth pulled — ache gone*, where the judgment refers to an operation and is verified by perceiving the operation. Thus in both cases truth is tested by perception or consistency; and pragmatism instead of adding a new test, is confined to showing the pragmatic character of the old familiar tests of experiment and inference.

Verification by sentiment, is the proof of an idea by its immediate pleasantness or by its tonic effect upon the will. Thus my idea of my future state is verified in this sense if "I like the idea," or if it makes life better worth living. "We choose the kind of theory to which we are already partial," says James; "we follow 'elegance' or 'economy.'" "No completely pessimistic system is ever judged completely 'true,'" says Schiller; "because it leaves unremoved and unresolved a sense of final discord in existence, it must ever stimulate anew to fresh efforts to overcome the discrepancy.[1] But it is clearly recognized by both of these writers that such considerations of sentiment are to be allowed to weigh only when the tests of perception or consistency are not decisive. Were the less parsimonious or less harmonious hypothesis to be verified by an *experimentum crucis*, or proved the only means of avoiding contradiction, man's taste for parsimony and harmony would not create the least presumption against it. The perfectly agreeable hypothesis must yield at once before fact or contradiction.

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[1] *Pragmatism and its Critics*, p. 87.

Would it not be clearer and more accurate, then, to say that while sentiment has nothing to do with truth, it may, as an extra-logical motive, be allowed to influence belief where verification proper is impossible? Indeed this is, I think, a fair rendering of James's famous "right to believe." The religious hypothesis is essentially an unverifiable hypothesis. Appeal to sensible facts and inference from established truth both leave the issue doubtful. But meanwhile it is necessary to act on *some* such hypothesis. We must in the practical sense believe where we cannot in the theoretical sense know. And here we are justified in allowing our tastes and our hopes to incline the balance. For we should be no better supported by proof if we believed the contrary, and should lose the emotional values beside. Furthermore, in this case, belief contributes evidence in its own support. For what I believe in is, so far as I am actively concerned in it, the more likely to prevail if I do so believe. Such a making true, means making *facts* which will in time afford a sensible verification for my belief. So in James's entire philosophy of religion[2] it is constantly implied that there is a strict sense of the term 'truth,' relating to the cognitive or theoretic interest, and both independent of and prior to all sentimental grounds for belief.

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[1] James: *Pragmatism*, p. 217; F. C. S. Schiller: *Humanism*, p. 50.

[2] See below, pp. 369–370.

Verification by General Utility

§ 7. Verification by general utility, is the proof of an idea's truth by the total satisfaction it affords, by its suitability to all the purposes of life, individual and social. "Truth," writes Schiller, "is that manipulation of [objects] which turns out upon trial to be useful, primarily for any human end, but ultimately for that perfect harmony of our whole life which forms our final aspiration."[1] Thus, my idea of the future state would be proved true on this ground, if it proved in all respects a good idea to live by, borne out by facts, consistent with my other ideas, a good working hypothesis, and above all consoling and inspiring. And it would receive additional verification of the same type if it satisfied the needs of mankind in the aggregate and survived the test of time.

The significant thing about this criterion is its indiscriminate merging of the more specific criteria discussed above. Pragmatists have repeatedly protested that the truth of an idea is determined by the specific purpose and the specific situation that give rise to the idea. Thus Dewey says, "It is the failure to grasp the coupling of truth of meaning with a *specific* promise, undertaking, or intention expressed by a thing which underlies, so far as I can see, the criticisms passed upon the experimental or pragmatic view of the truth."[2] In this opinion Dewey is undoubtedly correct. Pragmatism has seemed to most of its critics to put strictly cognitive considerations upon a par with considerations of sentiment and subsequential utility. And pragmatist writers are responsible for this impression — or misunderstanding, if such it be. Owing perhaps to the exigencies of controversy, or to a carelessness of statement, pragmatists have taught us to believe that an idea is true in so far as it works or satisfies *in any respect whatsoever*.[1] Or they have referred now to one ideational value and now to another, without consistently distinguishing the cognitive value from the rest. It has not unnaturally been supposed that pragmatism intends to make these various values commensurable and interchangeable. And it would be correct to infer from such a supposition that an idea which was shown to be contrary to sensible fact, or contradictory to accredited truths, might yet be proved true by affording a surplus of sentimental or utilitarian value.

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[1] *Humanism*, p. 61.

[2] *Influence of Darwin on Philosophy, and other Essays*, p. 95, note. Cf. also *Studies in Logic*, pp. 20, 23, where he defines a logic concerned with "description and interpretation of the function of reflective thought," and insists that thought cannot be judged "apart from the limits of particular crises in the growth of experience."

But such a conclusion is very properly denounced as reactionary. Science has become solvent and prosperous through regarding these values as fictitious, and excluding them from its accounts. Indeed enlightenment and criticism mean little more than conscious discrimination against these values. For the intellectual hero, this is the great renunciation. He must forego the pleasing and the hopeful hypothesis, and he must be resolutely indifferent to the extra-theoretical uses to which his hypothesis may be put. Knowledge advances *pari passu* with the specialization and refinement of the theoretic interest. The very use of knowledge, the variety and fruitfulness of its applications, depend on its being first tried and proved independently of these applications. And knowledge is a means of adaptation, not in proportion to its pleasantness and hopefulness, but in proportion as it dispels illusions, be they ever so grateful and inspiring. In short the pragmatist handling of this question of truth is confusing and dangerous in so far as it consists of loose generalizations concerning the practical or satisfying character of truth; in so far as it tends to blur the difference between the strictly theoretic value of ideas on the one hand, and certain derivative and secondary values on the other. Pragmatism is reactionary and dangerous in so far as it coördinates and equalizes verification by perception and consistency with verification by sentiment and subsequential utility.

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[1] Cf., e.g., such a statement as the following: "All that the pragmatic method implies, then, is that truths should *have* practical consequences. In England the word has been used more broadly still, to cover the notion that the truth of any statement *consists* in the consequences, and particularly in their being good consequences." James: *The Meaning of Truth*, p. 52.

There remains a strict and limited pragmatism which is not guilty of this offence. Such a pragmatism consists in the proof that the theoretic interest itself is in fact an interest. Ideas are functional rather than substantial. Their relation to their objects is not one of resemblance, but of leading or guidance. Their verification is not a matching of similars, but a process in which their leading or guidance is followed to that terminus of fact or being which they mean. And since the theoretic interest *is* an interest, it is as a whole rooted in life, and answerable to the needs and projects of life. In other words, truth, a theoretic utility, has also, because of the auspices under which it is begotten, a subsequential utility. Finally, it is the proper and consistent sequel to this to allow taste, aspiration, and hope to incline the balance of belief when, and only when, truth in the strict sense is not attainable.

The Realistic Version of Pragmatism

§ 8. Epistemology and metaphysics are so intimately related in contemporary philosophy, that a theory of knowledge is not infrequently accepted without further ado as a theory of being. And yet, as we have learned from our study of idealism, such procedure begs a most crucial philosophical question. What is the place of knowledge in reality? To what extent does the order of nature conform to the order of knowledge? Is the cognitive version of experience final and definitive, or is it abstract and partial? These are clearly independent questions, that are not necessarily involved in an account of knowledge itself. We have thus far confined our attention to the pragmatist description of the knowledge process. We must now face the further question: What is the pragmatist doctrine concerning the metaphysical status of the knowledge process? And we shall find, I believe, that pragmatism is here divided against itself on the same issue that divides idealism and realism. Some pragmatists, such as James, are avowedly, and on the whole consistently, realistic. Others, such as Schiller, favor, if they do not unequivocally adopt, the subjectivistic alternative.

Let us examine, first, the realistic version of pragmatism. Knowledge, according to all pragmatists, is a specific complex, comprising an idea or belief, an object ideated or believed, and a relation of meaning and verification connecting the two. Now a realistic version of this theory will assert that the various components of the knowledge process are independent of their places in this process. They are regarded as having other places besides, so that their being is not conditional on their finding a place in knowledge.[1] Thus a realistic pragmatist will in his epistemology describe the sensible facts of nature as the termini to which ideas lead, but he will not suppose that such facts must be thus related to ideas in order to be. Sensible facts are occasionally and accidentally the termini of ideas, but not essentially so. And he is led naturally to this view by his acceptance of the general biological categories. Knowledge is a form of *adaptation* to a preëxisting environment. Thought proposes, fact disposes. "If my idea is to work," says Bradley, in criticising pragmatism, "it must correspond to a determinate being which it cannot be said to make."[2] In the name of pragmatism, James accepts this very conclusion. "I start with two things, the objective facts and the claims, and indicate which claims, the facts being there, will work successfully as the latter's substitutes and which will not. I call the former claims true."

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[1] For a full discussion of the relation between realism and pragmatism, cf. W. P. Montague's articles, "May a Realist be a Pragmatist?" *Jour. of Phil., Psych., and Scientific Methods*, Vol. VI, Nos. 17–20.

[2] "On Truth and Practice," *Mind*, N. S., Vol. XIII, p. 311.

And again, "For him [the pragmatist], as for his critic, there can be no truth if there is nothing to be true about. . . . This is why as a pragmatist I have so carefully posited 'reality' *ab initio*, and why, throughout my whole discussion, I remain an epistemological realist."[1]

The Subjectivistic Version of Pragmatism

§ 9. A subjectivistic version of pragmatism, on the other hand, identifies the components of knowledge altogether with their place in that system, and there results a metaphysics in which reality coincides with the history of knowledge. Reality is either fact, idea, or "funded" belief, where these are *defined* as terms in the pragmatic process of verification. Whatever is known is essentially such, owing its character and its reality to the circumstance of its being known.

Thus Schiller writes, "That the Real has a determinate nature which the knowing reveals but does not affect, so that our knowing makes no difference to it, is one of those sheer assumptions which are incapable, not only of proof, but even of rational defence. It is a survival of a crude realism which can be defended only, *in a pragmatist manner*, on the score of its practical convenience, as an avowed fiction." Since reality is essentially what it is in the knowledge process, Schiller naturally concludes that "ontology, the theory of Reality," is "conditioned by epistemology, the theory of our knowledge"; and since the knowledge process is essentially practical it is proper to conclude that "*our ultimate metaphysic must be ethical.*"[2]

James has asserted that Schiller's view differs from his own only in method of approach. "As I myself understand these authors, we all three [including Dewey] absolutely agree in admitting the transcendency of the object

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[1] The *Meaning of Truth*, pp. xix, 195. Cf. Dewey: "So I beg to remind you that, according to pragmatism, ideas (judgments and reasonings being included for convenience in this term) are attitudes of response taken toward extra-ideal, extra-mental things." (*Influence of Darwin, etc.*, p. 155.) But cf. below, pp. 225, 314–315.

[2] *Humanism*, pp. 11, note, 9, 105.

(provided it be an experienceable object) to the subject, *in the truth-relation*. . . . What misleads so many of them [the critics] is possibly . . . the fact that the universes of discourse of Schiller, Dewey, and myself are panoramas of different extent. . . . Schiller's universe is the smallest, *being essentially a psychological one*. He starts with but one sort of thing, truth-claims, but is led ultimately to the independent objective facts which they assert, inasmuch as the most successfully validated of all claims is that such facts are there. My universe is more essentially epistemological. I start with two things."[1]

But the transcendency of the object "*in the truth relation*" is not realism. This means no more than that cognition is essentially dual, and does not affect the question of the transcendency of the object with reference to cognition as a whole. Realism asserts not only that the object transcends the idea, but that it in some sense transcends even that status of objectivity in which it is cognitively related to an idea. Nor does James recognize the crucial importance, in connection with this issue, of the starting-point. Because Schiller's universe of discourse *is* a psychological one, it turns out in the end that his universe is a psychological one also. He not only begins, but ends, *within* the knowledge process. Indeed he expressly adopts the phrase "idealistic experientialism" "to designate the view that 'the world' is primarily 'my experience,' *plus* (secondarily) the supplementings of that experience which its nature renders it necessary to assume. . . . In that case the world, in which we suppose ourselves to be, is, and always remains, relative to the experience which we seek to interpret by it."[2]

Precisely the same objections which hold against idealism in general hold against "experiential idealism." For its grounds are precisely the same. Arguing from 'the ego-centric predicament,' Schiller says: "The simple fact is that we know the Real *as it is when we know it;* we know nothing whatever about what it is apart from that process."[1] And, his "ethical metaphysics" is virtually assumed when he takes the world knowledge-wise at the outset. In other words, he is also guilty of the fallacy of 'definition by initial predication.' It is unnecessary for me to repeat what I have already said concerning these basal errors of the whole subjectivistic way of thinking.[2] And the subjectivistic principle in pragmatism is not only unproved, but here, as elsewhere, is essentially vicious. Before pressing this criticism further, however, I wish to consider the bearing of the realistic-subjectivistic alternative upon several pragmatist conceptions.

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[1] *Meaning of Truth*, Preface, pp. xvii-xix (italics mine). Cf. also pp. 242–244.

[2] *Humanism*, p. 281. Whether any pragmatist is wholly free from the subjectivistic taint of the term 'experience,' is perhaps doubtful. See below, pp. 314–315.

Realistic and Subjectivistic Interpretations. Satisfaction. The Making of Reality

§ 10. There is, for example, a realistic and a subjectivistic version of "satisfaction." Satisfaction, realistically construed, is grounded on a determinate relation between interest, instrument, and environment. Under given circumstances, and in behalf of the governing interest, a certain instrumentality has an objective rightness or fitness.[3] Thus an idea may 'satisfy' the situation, in the sense of *meeting* it. The confrontation of interest and environment is prior and independent, and imposes conditions upon the idea. So that the idea which feels satisfactory to the agent may not in fact work. There is a difference between a *sense* of adaptation and *real* adaptation.

In subjectivistic terms, on the other hand, the state of felt satisfaction is decisive. The environment and the interest have no inherent structure apart from the successes of knowledge. They are the modes or the precipitates of an inwardly harmonious life. From the subjectivistic standpoint, accordingly, there is no difference of principle between verification by contact with the environment and verification by sentiment. Indeed the former tends to be resolved into the form of the latter.[1]

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[1] *Op. cit.*, p. 11, note.

[2] See above, pp. 126–132.

[3] See below, pp. 333–334.

Or consider the pragmatist doctrine that knowing *makes* reality. For the realistic pragmatist this doctrine has a very limited scope. Schiller sums up the realistic version of the matter as follows:

(1) "Our making of truth really alters 'subjective' reality." In other words, knowing adds *itself* to reality. (2) "Our knowledge, *when applied*, alters 'real reality' and (3) is not real knowledge if it cannot be applied. Moreover (4) in some cases, e.g., in human intercourse, a subjective making is at the same time a real making of reality. Human beings, that is, are really affected by the opinion of others." (5) "*Mere knowing always alters reality, so far at least as one party to the transaction is concerned.* Knowing always really alters the knower." [2]

A. W. Moore gives a similar account of knowledge of the past. The past can be modified by knowledge in so far as the sequel to the past, or the past continued into the present, can be affected by applied knowledge of it. "Cæsar's act, like John Brown's, 'goes marching on.' Like all other *historic* acts, it is not yet finished, and never will be so long as it continues, through acts of knowledge, to produce new 'results.'"[3] In other words, on realistic grounds a thing is *not* modified simply by being known. Knowledge modifies knowledge, and the thing which is known is liable on that account to be acted on, and so modified. But the past and the distant, though they may be known, cannot be modified. Only the present continuation of the past or the near continuation of the distant can be modified, because modification requires a propinquity that is not required for knowledge.

But this restricted modification by knowledge does not satisfy the metaphysical yearnings of pragmatism. The pragmatist as a rule prefers to state the matter loosely — to assert the interesting and hopeful generalization that knowledge makes reality, rather than to specify in *what respects*. Or he goes over altogether to the radical contention that the environment is wholly plastic, and knowledge an instrument of "creative evolution." In the essay from which I have quoted above Schiller fondly dwells on such a speculative possibility. He suggests a hylozoistic nature that responds socially as our fellows respond. He emphasizes the incompleteness of reality, the freedom of man, and the perpetual yielding of fact to art. And though he nowhere removes the paradox in which he admits the doctrine to be involved, he makes clear his faith "that Truth is great and must prevail, because it has the making of Reality."[1]

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[1] Cf. Schiller, *Humanism*, pp. 49–50.

[2] *Studies in Humanism*, pp. 438–439.

[3] A. W. Moore: *Pragmatism and its Critics*, p. 103.

The issue is further complicated by the pragmatist doctrine concerning concepts; these, as distinguished from percepts, being supposed to be peculiarly the creatures of the knowing process. The conceptualized world, at least, is a made world, a projection of practical needs. Bergson, the arch-creationist of them all, rests his case mainly on his theory of concepts, and we shall therefore return to this matter again.

The Dilemma of Pragmatism

§ 11. We have already learned enough to enable us to recognize the seriousness of the dilemma by which pragmatism is confronted. On its strictly epistemological side pragmatism is naturalistic and biological. The mind is conceived as operating in an environment to whose decrees it must submit as the price of adaptation. Upon this basis the complex process of knowledge is made up of definable parts. Truth is a product into which the environment enters as a prior and independent component. The environment is not itself subject to the fluctuations and vicissitudes of knowledge; and knowledge may be construed as a human and doubtful enterprise without compromising the structure of the world from which it arises and to which it addresses itself.

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[1] *Studies in Humanism*, p. 451. Cf. p. 428.

But when, on the other hand, the factors of knowledge, and in particular its environment, are regarded as the precipitate of knowledge itself — then knowledge is left suspended in mid-air. It must be conceived as somehow spinning out of itself the very auspices and surroundings which condition it and give it meaning. There arises the same contradiction that vitiates the Fichtean idealism. Activity must itself contrive the very foil and medium without which it cannot act. And if the arguments for the subjectivistic view are accepted as valid, there is no defence against the vicious paradoxes of relativism. Individual judgments conflict, your judgment and mine, my judgment of today and my judgment of to-morrow, the belief of one epoch, and the belief of another; and the objects of these judgments, now regarded as their creations, are implicated in this conflict. There is no court of appeal to arbitrate their destructive inconsistency. It is not that there is no fixed truth; there is no fixed fact or being, not even past events. For the subjectivistic pragmatist has destroyed the distinction on which pragmatism itself has repeatedly insisted, the distinction between truth and reality. There are, then, only two courses open to the subjectivistic pragmatist. If he is to retain his subjectivism he must imitate the example of idealism, and accept a cosmic or absolute knower. For if reality is to repose in knowledge, there must be a knowledge which gives shape and outline to the world. The voluntaristic idealist is on subjectivistic grounds correct in charging pragmatism with relativism; and his offer of "absolute pragmatism"[1] as a harbor of refuge is both pertinent and opportune.

Thus if pragmatism is to avoid absolutism, and remain within empirical and naturalistic limits, it must adopt the realistic alternative, as James has so successfully done.

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[1] Royce: *William James, and other Essays*, p. 254; cf. also "The Eternal and the Practical," *Phil. Review*, Vol. XIII, 1904.

And the pragmatist theory of knowledge cannot be less illuminating and important for being merely a theory of knowledge. To it will still belong the credit for an original and sound analysis of the process of reflective thought — for a scrupulously empirical account of 'ideas,' of 'meaning,' and of 'truth' as a specific and characteristic form of human success.

CHAPTER X

IMMEDIATISM VERSUS INTELLECTUALISM[1]

Definition of the Issue

§ 1. The pragmatist theory of knowledge, in the limited sense, is an analysis and description of the concrete process of intellection or reflective thought. It is an account of *mediate* knowledge, or knowledge *about* — of that knowledge in which ideas *of* things are entertained, believed, or verified. Pragmatism finds intellection to be essentially a practical process, or operation. But in the course of his exposition, the pragmatist is perpetually attacking what he calls 'intellectual*ism;*' by which he means the uncritical use of the intellect. The pragmatist describes the intellect, and because he understands it, he can discount it; the "intellectualist," on the other hand, reposes a blind confidence in it. The pragmatist sees *around* the intellect, and construes reality in terms of its process and circumstances; while the horizon of the intellectualist is bounded by the intellect, and he can only use it and construe reality in terms of the results. Whereas the pragmatist vitalizes the intellect, his opponent intellectualizes life.

It is the old issue between the intellectualistic and voluntaristic views of the soul, revived in a new form; and it appears at first as though it were merely a question as to which of two parties shall have the last word. The intellectualist asserts that the will is a case of knowledge; it is what you know it to be; it must be identified with your idea or definition of it. The voluntarist or pragmatist, on the other hand, protests that knowing — the having of ideas or the framing of definitions, is a case of willing. And we seem to be launched upon an infinite series of rejoiners.

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[1] Portions of this and the following chapter are reprinted from "Notes on the Philosophy of Bergson," *Jour. of Phil., Psych., and Scientific Methods*, Vol. VIII, 1911, Nos. 26, 27.

But such is not necessarily the case. For it is entirely possible to regard both parties as correct. Suppose it to be admitted that knowing is a kind of willing. What, then, is willing? Is there any contradiction in supposing that one can *know;* in supposing that one can will to know what willing is? Bergson evidently believes that there is. He argues that the intellect, because it is a *special form* of life, cannot know the whole of life. "Created by life, in definite circumstances, to act on definite things, how can it embrace life, of which it is only an emanation or an aspect? Deposited by the evolutionary movement in the course of its way, how can it be applied to the evolutionary movement itself?"[1] But why not? Unless we are to assume that to know and to be known are the same thing, there is not the slightest difficulty in supposing that a part can know the whole. Assuming intellection to be a special act, there is no difficulty in supposing that it addresses itself in turn to the collateral parts of life; and in supposing that the act itself is known through the mutual knowledge of several intellects.[2] Furthermore, it is absurd to describe knowing as willing unless one *does* know what willing is.

The purely dialectical question turns out, like most such questions, to be a quibble. The real question is this: is there a *special variety* of knowledge, namely mediate or reflective knowledge, the nature of which as a process can be apprehended only by another more general variety of knowledge, namely immediate knowledge? In these terms it is possible to distinguish two theoretical opponents and adjudicate their quarrel. The pragmatist, on the one hand, finds that reflective thought needs to be supplemented by some variety of non-reflective experience. Reflective thought, for example, implies sensible facts, which are simply sensed, and no more. Or, reflective thought itself is a process, which as such is directly felt. Again, certain things, such as time, cannot in their native character be grasped by thought at all, but must be apprehended by instinct. The intellectualist, on the other hand, insists that all things must be identified with what we know of them, and that there is but one way to know, namely, by reflective thought. In short, *the real support of the pragmatist polemic against intellectualism is insistence on a non-intellectual variety of knowledge*, which is more fundamental and more comprehensive than intellection; which affords, as James expresses it, real "insight" as distinguished from the superficiality and abstraction of intellection.[1]

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[1] Bergson: *Creative Evolution*, trans. by A. Mitchell, p. x; cf. p. 49.

[2] Cf. below, pp. 255, 295–296.

Non-intellectual Experience, or Immediacy

§ 2. Pragmatists offer different versions of this non-intellectual or non-reflective experience. With Bergson it is "the fringe of vague intuition that surrounds our distinct — that is, intellectual — representation." If he hesitates to call it knowledge, it is only because it has more rather than less of cognitive value than knowledge in the usual sense. "The feeling we have of our evolution and of the evolution of all things in pure duration is there, forming around the intellectual concept properly so-called an indistinct fringe that fades off into darkness." And intellectualism forgets "that this nucleus has been formed out of the rest by condensation, and that the whole must be used, the fluid as well as and more than the condensed, in order to grasp the inner movement of life. Indeed, if the fringe exists, however delicate and indistinct, it should have more importance for philosophy than the bright nucleus it surrounds. For *it is its presence that enables us to affirm* that the nucleus is a nucleus, that pure intellect is a contraction, by condensation, of a more extensive power."[2] In short, intellectual knowledge is surrounded and corrected by intuitive or immediate knowledge. The former is defined and assigned limits by the evidence of the latter.

James alone of pragmatist writers is always willing to refer to the non-intellectual experience as a species of knowledge. As he expresses it in his exposition of Bergson, there is

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[1] *Pluralistic Universe*, p. 246.

[2] *Op. cit.*, pp. 49, 46 (italics mine).

"a living or sympathetic acquaintance" with things, distinguished from the knowledge *about* them that "touches only the outer surface of reality." "The only way in which to apprehend reality's thickness is either to experience it directly by being a part of reality one's self, or to evoke it in imagination by sympathetically divining some one else's inner life." If you are to really "*know* reality," you must "dive back into the flux itself," or "turn your face toward sensation, that fleshbound thing which rationalism has always loaded with abuse."[1]

Dewey's opinion would seem to differ from that of Bergson and James, mainly in his strict reservation of the term 'knowledge' for the intellectualized experience. The non-intellectual experience is there in his view as in that of Bergson and James, and it plays substantially the same rôle. "Things are what they are experienced to be"; and knowledge is by no means the "only genuine mode of experiencing." The "knowledge-object" is immersed in "an inclusive, vital, direct experience." There is an "experience in which knowledge-and-its-object is sustained, and whose schematized, or structural, portion it is." Knowing being one mode of experiencing, "the primary philosophic demand [from the standpoint of immediatism] is to find out *what* sort of an experience knowing is — or, concretely, how things are experienced when they are experienced *as* known things."[2] In short, this extra-cognitive experience is clearly an experience of things *to be*, an experience of things *as* such and such; and thus a revelation of their nature. As with Bergson and James, it affords the light by which the cognitive process itself is circumspected and discounted, and intellectualism denounced as rendering a limited view of reality.

§ 3. Thus far, then, the pragmatist polemic against intellectualism signifies that knowledge commonly so-called, the knowledge mediated by ideas, is but one way, and that not the most profound way, of knowing things. The essentially practical or instrumental character of mediate knowledge suggests that it is knowledge 'for a purpose,' a knowledge limited by a governing motive. The full extent and native quality of reality, including the ideational or mediating process itself, is to be apprehended only by immediacy, such as sensation or the feeling of life. We must now examine the grounds of this pragmatist contention. We must ask, in other words, why it is that intellectual knowledge is limited, inadequate, and secondary.

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[1] *A Pluralistic Universe*, pp. 249–252.

[2] "Reality as Experience," in *Jour. of Phil., Psych., and Scientific Methods*, Vol. III, p. 256; *Influence of Darwin, etc.*, pp. 228, 229.

Immediacy Implied in Mediate Knowledge

In the first place, it is contended that mediation implies immediacy. The mediating relation *between* the idea and its object, always implies the immediate presence *of* the idea, *of* the process, and eventually *of* the object or terminus of the process. "It is in the concrete thing *as experienced*," says Dewey, "that all the grounds and clues to its own intellectual or logical rectification are contained." "Sensations," says James, "are the mother-earth, the anchorage, the stable rock, the first and last limits, the *terminus a quo*, and the *terminus ad quem* of the mind." Or, as he puts it more emphatically, "these percepts, these *termini*, these sensible things, these mere matters-of-acquaintance, are the only realities we ever directly know, and the *whole history of our thought is the history of our substitution of one of them for another, and the reduction of the substitute to the status of a conceptual sign.*"[1]

Thus not only is mediate knowledge tested by immediacy, but it is never more than a second best, a mode of knowledge to be adopted in default of immediacy. The best idea will be that which renders its own existence unnecessary by leading to "an actual merging of ourselves with the object, to an utter mutual confluence and identification," — "a completely consummated acquaintance."[2] This follows from the function of ideas. Their virtue lies in their substitutional and provisional character. They are means of knowing beyond the limits of immediacy; but are valid there only in so far as they refer to possibilities of immediacy. It is not unfair to say that on anti-intellectualist grounds, reality is revealed only when it is actually or potentially present. Whether this be construed as a limiting of knowledge in general or only of one kind of knowledge in behalf of another, is a matter of words. Direct, presentative, immediate experience, in which reality is itself in mind, in which the knower and the known coincide, is more comprehensive, fundamental, and penetrating than the indirect, representative, mediate experience which implies it, refers to it, and is formed out of it.

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[1] Dewey: *op. cit.*, p. 235; James: *Meaning of Truth*, p. 39 (italics mine).

[2] James: *op. cit.*, p. 156.

In examining further the grounds of the pragmatist indictment of intellectualism we come at once upon the question of concepts. Intellectualism is charged with a blind and excessive use of concepts, with an exclusive reliance on them despite the *abstractness* and *artificiality* which vitiate them. This indictment of concepts suggests their distinguishing marks. A concept is abstract in the sense of being a discrimination, separation, and fixation of some limited portion of a wider experience. Being the work of analysis, a concept is clear and distinct. A concept is unambiguous; once the identification has taken place the concept is just what it is identified as being, and can never be anything else. It is discrete and changeless, as distinguished from the unlimited richness, the marginal vagueness, and perpetual flux of sense and feeling. But these virtues are offset by its artificiality. A concept is an instrument, owing its existence and form to its use. As a human artifact it is other than, and in a sense false to, the primitive experience from which it is created and to which it is applied. In other words, a concept is an *idea*, in the pragmatist sense.[1] To this disparagement of concepts as abstract and artificial we must now turn.

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[1] Whether all ideas are concepts is not clear; and for our immediate

The Abstractness of Concepts. "Vicious Intellectualism"

§ 4. James bases his criticism of concepts mainly on their abstractness. He repeatedly emphasizes their selective or partial character. This would not render them false if it were understood, and due allowance made for it. But it is customary for intellectualists to use concepts as though they were exhaustive of their objects, and to deny to the object whatever is not contained in the concept. This is what James calls "*vicious*" intellectualism or abstractionism. He describes it as follows: "We conceive a concrete situation by singling out some salient or important feature in it, and classing it under that; then, instead of adding to its previous characters all the positive consequences which the new way of conceiving it may bring, we proceed to use our concept *privatively;* we reduce the originally rich phenomenon to the naked suggestions of that name abstractly taken, treating it as a case of 'nothing but' that concept, and acting as if all the other characters from out of which the concept is abstracted were expunged."[1]

In other words, "vicious intellectualism" proceeds as though a conceptual truth about a thing were the exclusive truth about the thing; whereas it is true only *so far as it goes*. Thus the world may be truly conceived as permanent and unified, since it is such *in a certain respect.* But this should not lead us, as it has led certain intellectualists, to suppose that the world is therefore not changing and plural. We must not identify our world with one conception of it. In its concrete richness it lends itself to many conceptions. And the same is true of the least thing in the world. It has many aspects, none of which is exhaustive of it. It may be taken in many relations or orders, and be given different names accordingly. As it is immediately presented it contains all these aspects, as potentialities for

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purpose it is not necessary to determine. See below, pp. 231–232. The best discussion of the matter is to be found in James: *Some Problems of Philosophy*, pp. 48 sq.

[1] *Meaning of Truth*, p. 249 (italics mine); cf. *ibid.*, p. 147; and *Pluralistic Universe*, p. 218. Cf. also below, p. 365.

the discriminating and abstracting operation of thought. "Vicious intellectualism" thus rests on the errors that I have already referred to as 'exclusive particularity' and 'definition by initial predication': the false supposition that because a thing has one definable character, it cannot also have others; and that because it has been named first for one of its aspects, the others must be reduced to it or deduced from it.[1]

Now the fault of "vicious intellectualism" evidently lies in the misuse of concepts, and not in the nature of the concepts themselves. There is nothing to prevent our supposing that the abstractness of single concepts can be compensated for by the addition of further concepts, or by some conceptual system in which the presence and interrelation of many concepts is specifically provided for. In this case *the remedy for the short-comings of concepts would be more concepts*. But the indictment which pragmatism finds against intellectualism is much more serious than this. It is charged that concepts are such that they can never serve as means of knowing the native and salient characters of reality. To grasp these we must abandon concepts altogether, and turn to the illumination or inspiration of immediacy. To this charge, that there is an irremediable cognitive flaw in concepts, we must now turn.

The Failure of Concepts to Grasp Reality. Radical Anti-intellectualism

§ 5. Of eminent contemporary writers belonging to the pragmatist school in the broad sense, Bergson is the most radical 'anti-intellectualist.'[2] In his opinion intellect not only divides and separates reality, thus replacing its concrete fulness with abstracted and partial aspects; but is doomed to failure, however far its activities may be carried. Intellect cannot, in short, correct itself, and atone for its own short-comings.

The cause of this irretrievable failure lies in the fact that intellect is essentially the instrument of action. For the purpose of action it is necessary to specify and fixate some present aspect of the environment. The object of action must be distinguished and held by the attention. Through the repetition of such attitudes the intellect elaborates a scheme or diagram in which the several terms of analysis are correlated. They remain distinct and external, but are woven by relations into a system, which is like its component terms in being stereotyped and fixed. The pattern of all such systems is geometry, the most perfect expression of the analytical method. The sign of the intellect's handiwork is spacial "juxtaposition" and arrangement, the static coördination of discriminated elements. In vain, then, does the intellect seek to correct itself — for the further it proceeds the more thoroughly does it reduce reality to this form.

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[1] See above, pp. 126–128.

[2] Although his view is expounded with evident approval by James, in *A Pluralistic Universe*, Lect. VI.

And it is this form itself, and not any specific or incomplete phase of it, that is foreign to the native, aboriginal quality of reality. The latter abides, not in fixity, but in fluidity; not in sharpness of outline, but in adumbration; not in external juxtaposition, but in "interpenetration;" not in discreteness, but in continuity; not in space, but in time. The helplessness of the intellect to escape its own inveterate habits appears most strikingly in its treatment of time. For it spacializes even this, conceiving it as a linear series of instants, whereas real time is an "*enduring*" (*durée réelle*), a continuous and cumulative history, a "growing old." And this real time we cannot *think;* we must "*live* it, because life transcends intellect." [1]

A radical anti-intellectualism may serve as the ground of an attack upon science, as is illustrated by the views of the French pragmatist LeRoy, and the Italian pragmatist Papini. "Science consists only of conventions, and to this circumstance solely does it owe its apparent certitude; the facts of science and, *a fortiori*, its laws are the artificial work of the scientist; science therefore can teach us nothing of the truth; it can serve only as a rule of action."[1] But there is a sequel. For with LeRoy and Papini, as with Bergson, the failure of science is compensated by an immediate sense of the power of life. Science manufactures concepts, which misrepresent reality; but the life which science serves, the creative agency which forges and uses the instruments, is known to itself by instinct and faith.

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[1] Bergson's *Creative Evolution*, trans. by A. Mitchell, pp. xiv, 46. Cf. Ch. I, *passim*.

The Failure of Anti-intellectualism to Understand the Intellectual Method. Concept as Function and as Content

§ 6. This wholesale indictment of the intellectual method rests, I am convinced, on a misunderstanding of that method. It will be worth our while to seek more light on the matter. In the first place, as has been already suggested,[2] neither Bergson nor James is clear as to whether a concept is to be distinguished by its function or by its content. Is 'concept' the same as 'idea,' or is it a special class of ideas? This question is of crucial importance. For if 'concept' is only another name for 'idea,' and if an idea is essentially a function or office, and not a content, then the failure of concepts must mean simply the failure of the ideating or mediating operation of thought. But this operation, according to the pragmatist account, is essentially a mode of access to immediacy. The more it is perfected the more unerringly it leads us into the presence of its object. To prove that intellect is essentially instrumental, and then to attack it in behalf of the very end for which it is useful, would be a strange procedure. In fact the anti-intellectualist perpetually employs intellect in this sense, even with reference to 'reality.' He uses words and figures of speech which he hopes will conduct the reader or hearer to the immediate experience in which 'reality' is revealed. A pragmatist can have no ground for maintaining that there is any reality which cannot be represented, for he means by representation only a pointing or guiding, for which anything may serve. Whatever is experienced or felt can be represented in this sense, because it is necessary only that it should have a locus or context to which one may be directed.

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[1] Quoted from an exposition and criticism of LeRoy by Poincaré, in *The Value of Science* (trans. by Halsted), p. 112. See also above, pp. 93 ff. For Papini, cf. below, p. 264.

[2] See above, p. 227.

We may suppose, then, that what the anti-intellectualist attacks is not the idea as such, but a certain class of ideas; such, for example, as the logical and mathematical ideas, 'term,' 'line,' etc. But 'term' and 'line' are ideas only when *used* in a certain way. In themselves they are simply characteristic bits of experience. They may be immediately known or presented, as well as used in discursive thought. Even 'abstractions' may be apprehended by a direct act of discrimination, and it is only in such direct apprehension that their specific character is revealed. It cannot be claimed that such bits of experience as 'term' and 'line' are peculiarly ill-fitted to serve as ideas, because, as we have seen, the content of an idea is irrelevant. *Any* bit of experience will do, as is best illustrated by the case of words. In short the fault, if there be any, cannot lie in the intellectual use of these elements; it must lie, not in their employment as ideas, but in their inherent character. The anti-intellectualist polemic must mean that reality is not such as 'term' and 'line'; or that these characters are somehow contradicted and overruled by the dominant characters of reality, such as continuity and life.

The Confusion between the Relations of Symbols and the Relations Symbolized

§ 7. But this contention rests, I think, on another misunderstanding. There is an inveterate liability to confuse a symbolized relation with a relation of symbols. It is commonly supposed that when a complex is represented by a formula, the elements of the complex must have the same relation as that which subsists between the parts of the formula; whereas, as a matter of fact, *the formula as a whole* represents or describes a complex other than itself. If I describe *a* as "to the right of *b*," does any difficulty arise because in my formula *a* is to the left of *b?* If I speak of *a* as greater than *b*, am I to assume that because my symbols are outside one another that *a* and *b* must be outside one another? Such a supposition would imply a most naïve acceptance of that very "copy theory" of knowledge which pragmatism has so severely condemned. And yet such a supposition seems everywhere to underly the anti-intellectualist's polemic. The intellect is described as "substituting for the interpenetration of the real terms the juxtaposition of their symbols"; as though analysis discovered terms, and then *conferred* relations of its own. Whereas, as James himself has been at much pains to point out, terms and relations have the same status. Terms are found *in* relation, and may be thus described without any more artificiality, without any more imposing of the forms of the mind on its subject matter, than is involved in the bare mention of a single term.[1]

It is this misunderstanding which underlies the anti-intellectualist's contention that continuity cannot be described. "For," says James, "you cannot make continuous being out of discontinuities, and your concepts are discontinuous. The stages into which you analyze a change are *states*, the change itself goes on between them. It lies along their intervals, inhabits what your definition fails to gather up, and thus eludes conceptual explanation altogether."[2] I can understand this argument only provided the author assumes that the intellectualist tries to explain continuity by *adding concept to concept*. The successive and discontinuous *acts of conceiving* are then held to be contrary to the continuity of the subject matter. But the assumption is incorrect. A line, for example, may be conceived as a class of positions possessing interrelations of direction and distance. This conception may be represented by the formula, *a. . . b. . . c. . . n. . . .* One may then add the statement that between any two positions such as *a* and *c*, there is a third position *b*, which is after *a* and before *c;* thus expressly denying that there is the same hiatus between the positions of the line as between the symbols of the representation. The use of the symbols, *a*, *c*, etc., indicates the manifoldness and serial order of the positions, and the statement defines their 'compactness.'[1] With such a formula and such a statement, one may *mean* continuity, despite the fact that the symbols and words are discrete. The word 'blue' may mean blue, although the word is not blue. Similarly, continuity may be an arrangement meant by a discontinuous arrangement of words and symbols.

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[1] Bergson: *Time and Free Will*, trans. by F. L. Pogson, of *Les données immédiates de la conscience*, p. 134; James: *A Pluralistic Universe*, Appendix A.

[2] James: *op. cit.*, p. 236.

The Supposition that Concepts are Necessarily Privative

§ 8. In the third place, the anti-intellectualist polemic is based upon the misconception that whenever concepts are used they must be used "privatively," in James's sense. In other words, it is taken for granted that all intellectualism must be "vicious," or blind to its own abstractness. James, as we have seen, distinguishes this view as one variety of intellectualism. To conceive a thing as *a*, and then assume that it is *only a*, is to be "viciously" intellectual.[2]

But it is evident that provided one recognizes that to be *a* does not prevent a thing's being also *b*, *c*, etc., one may be innocently or even beneficently intellectual. And this possibility, Bergson, at any rate, appears to overlook. Thus he constantly argues as though the use of the relational logic involved *the reduction of everything to it*. The analytical method does imply that reality consists of terms and relations. It does *not*, however, imply that this bare term-and-relation character is *all there is to it*. Thus, blue is different from red, which is a case of t^1 (R) t^2. But in the concrete case, the bare logical term-character t is united first with one quality and then with another; while R is not merely relation in general but the specific relation of

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[1] Cf. Russell: *Principles of Mathematics*, p. 296.

[2] See above, pp. 228–229.

'difference.' And similarly the formulas of mathematics, mechanics, physics, etc., while they are cases of logical systems, have each their special superadded and distinguishing characters.

The abstract logical system is non-temporal; but a temporal system may nevertheless be *a case* of a logical system, provided the time character be introduced. Hence it is absurd to say, as Bergson says, that "when the mathematician calculates the future state of a system at the end of a time *t*, there is nothing to prevent him from supposing that the universe vanishes from this moment till that, and suddenly reappears. It is the *t*-th moment only that counts — and that will be a mere instant. What will flow on in the interval, that is to say, real time, does not count, and cannot enter into the calculation."[1] I can make nothing of this unless the author is regarding *t* merely as a *number*. But as a matter of fact *t* is a number of units of *time*, hence an interval, or extended flow; and multiplying this factor into the formula means that the whole process has continued *through* that interval — it means that the lapse of time *is* counted, is expressly brought into the calculation.

Or, consider the same author's contention that to conceive time is to spacialize it. Again he is misled by supposing that because time is conceived as orderly, it is therefore *nothing but* order. Such an intellectualism would indeed be vicious. Bare logical order *is* static; and can never of itself express time. But it is an utterly different matter to regard time, like space and number, as a *case* of order, having the specific time *quale* over and above the properties of order. 'Position,' 'interval,' 'before' and 'after,' are then to be taken in the temporal sense; and the terms of the series are to be taken, not as bare logical terms, still less as spacial points, but as instants possessing a unique time-character of their own.

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[1] *Creative Evolution*, p. 22. For a fuller discussion of Bergson's theory of time, cf. below, pp. 255–261.

§ 9. Radical anti-intellectualism betrays, in short, a misapprehension of the analytical method. This method means simply the discrimination and specification of the detail of experience. It has led to the discovery of certain elements and relationships that possess a remarkably high degree of generality, such, e.g., as those of logic and mathematics. But while these elements and relationships, because of their generality, serve to make things commensurable on a comprehensive scale, and are consequently of a peculiar importance in knowledge, it does not follow that intellectualism aims to abolish everything else. That which *has* logical form is not *pure* form.

The Misunderstanding Concerning Analysis

Furthermore, it is entirely incorrect to suppose that analysis imposes the relational and orderly arrangement regardless of the subject matter. The analytical method is neither an accident nor a prejudice. It arises from the fact that the subject matter with which science and philosophy deal is complex. And this is virtually admitted in every reference to it which anti-intellectualistic writers make. 'Continuity,' 'duration,' 'activity' and 'life' present, even in the most immediate experience of them which it is possible to obtain, an unmistakable multiplicity of character. They may be divided, and their several characters abstracted and named in turn; and simply because they *contain variety*. The anti-intellectualist is apparently ready to admit their multiplicity, but balks at admitting their "distinct multiplicity."[1] But "distinctness" and "indistinctness" are psychological and not ontological differences. An "indistinct multiplicity" is simply a multiplicity that is as yet but imperfectly known — a distinct multiplicity qualified by an incompleteness of discrimination.

Or is the anti-intellectualist troubled by the consideration that the concepts of analysis are not exact *enough;* that they over-simplify nature by trying to express it in terms of a few broad types? Thus it may be contended that the boundaries of bodies are never absolutely straight or circular, or that no orbit is perfectly elliptical. But note what this criticism implies. It is based either on the fact that there is a sensible discrepancy between the form attributed to natural bodies in exact science, and the actual form of these bodies; or on the presumption that such a discrepancy would appear were our methods of study to be improved. In either case, the discrepancy in question is an analytical discrepancy, a difference of the same definite character as the terms compared. If natural boundaries or orbits are not of a relatively simple geometrical character, then it must be because they are of a more complex geometrical character; if not a straight, then a broken line, if not circular or elliptical, then curved in some other way. Such considerations as these, therefore, do not tell in the least against the analytical method, or cast doubt on the relational structure of reality.

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[1] Bergson: *op. cit.*, p. xiv.

The Supposed Superiority of the Immediacy that Precedes Analysis

§ 10. But anti-intellectualism is involved in a more serious error. Not only does it misunderstand the view which it attacks; but it puts forth a claim of its own which is unfounded, the claim, namely, to the immediate apprehension of a fused and inarticulate unity. It exploits the common error of 'pseudo-simplicity.' This error consists, as we have seen, in projecting a verbal or subjective simplicity into the object. The single word 'life,' e.g., is used to refer to the complex thing, life. It is then assumed that behind the various characters of life, or infusing them, there must be a corresponding unity. Or, at the outset of inquiry, life is a problematic unity, a bare *that*, a something to be known; and it is assumed that this simple *quale*, this merging of elements, not-yet-but-to-be-distinguished, must somehow be among the elements themselves.

There are two ways of unifying experience. One way is to *carry analysis through*, and discover the connections of the parts, and the articulate structure of the whole. The other is to reverse the operation, to *carry it back* to its vanishing point — to the bare word or the bare feeling of attention. In the second case the experience is simplified — by the disappearance of the object! A perfect simplicity, an ineffable unity, is attained at the point where the object drops out altogether. But then knowledge has ceased; and the experience, what there is of it, is of no cognitive significance whatsoever.

Thus Bergson says: "The more we succeed in making ourselves conscious of our progress in pure duration, the more we feel the different parts of our being enter into each other, and our whole personality concentrate itself in a point."[1] What Bergson is here describing is, I am convinced, the disappearance of cognition into an experience which is not an experience *of* anything at all. Such a unification may be obtained by falling asleep, or by auto-hypnosis. It throws no light whatever on the nature of anything. My experience *of* life has dissolved; but nothing follows concerning the nature of life. I have simply closed my eyes to it. I have blurred and blotted out my knowledge of life; but life is not therefore blurred or extinct. In the twilight all things are gray; in ignorance all things are simple. Bergson speaks of the "feeling of duration," as "the actual coinciding of ourself with it"; and this, he says, admits of degrees. But I am not more a live when I feel duration than I was before when I thought it. The difference is that, whereas I formerly knew duration, or something of it, now I know comparatively nothing; I simply *am* duration. Duration itself is neither more nor less complex than it was before; my knowledge only has been simplified — to the point of disappearance. Bergson speaks of an instinctive sympathy which, if it "could extend its object and also reflect upon itself," "would give us the key to vital operations."[2] But I believe that it is safe to say that in proportion as there is reflection upon instinct, its complexity is manifest; and that in proportion as instinct is simple it has escaped experience altogether, and is, so far as cognition is concerned — nothing.

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[1] *Creative Evolution*, p. 201.

[2] *Ibid.*, pp. 200, 176.

The Subjectivistic Version of Immediatism

§ 11. The pragmatist critique of intellectualism, like the pragmatist theory of truth, tends to assume one or the other of two forms. Using Dewey's term "immediatism" to express this pragmatist doctrine positively rather than negatively, we may say that there is a subjectivistic or idealistic version, and a realistic version, of immediatism.

The crucial issue upon which the idealistic and realistic versions of immediatism divide is whether the activity of the intellect is creative or selective. Does the intellect *generate* concepts, or does it *discover* them? If we are to judge from the *Creative Evolution*, Bergson regards the intellect as an artificer. In other words, ideas, things, and objects express, not the environment, but the agent. It is by no means clear that this is consistent with the Bergson view, that intellect is a means of adaptation. "If," as he himself says, "the intellectual form of the living being has been gradually modelled on the reciprocal actions and reactions of certain bodies and their material environment, how should it not reveal to us something of the very essence of which these bodies are made?" But this query does not prevent Bergson from deriving "intellectual form" from the intellect itself. The origin of it is to be looked for "in the structure of our intellect, which is formed to act on matter from without, and which succeeds by making, in the flux of the real, instantaneous cuts, each of which becomes, in its fixity, endlessly decomposable. . . . *This complexity is the work of the understanding.*"[1] In other words, the *relational texture*, the *grain* of things, is generated by intellect. Given matter, not-yet-intellectualized, is pure flux, in its own substance as simple, smooth, and undivided as the life which acts on it — the life of which it is but the "inverse" movement. According to this view, then, to conceive is to bring about the existence of that which is called concept. Conceptual discreteness is the derivative of the pure activity of intellect, and is in no sense contained in that upon which intellect operates.

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[1] *Ibid.*, Introduction, p. xi, p. 250 (italics mine).

The Realistic Version of Immediatism

§ 12. According to the realistic version of immediatism, on the other hand, the intellect discovers, but does not make, concepts. This is the view that is on the whole consistently maintained by James. Concepts are not merely functions of the intellect, they constitute a "coördinate realm" of reality. "If we take the world of geometrical relations, the thousandth decimal of π sleeps there, tho' no one may even try to compute it." "Philosophy must thus recognize many realms of reality which mutually interpenetrate. The conceptual systems of mathematics, logic, æsthetics, ethics, are such realms, each strung upon some peculiar form of relation, and each differing from perceptual reality in that in no one of them is history or happening displayed. *Perceptual reality involves and contains all these ideal systems and vastly* more besides."[1] The crux of the matter lies in this last statement. Reality is not *other* than the conceptual order, but *more* than the conceptual order. Intellect is an organ, not of fabrication, but of "discernment," a power men have "to single out the most fugitive elements of what passes before them . . . aspect within aspect, quality after quality, relation upon relation."[2]

When thus construed, pragmatism's account of intellect is consistent with its general naturalistic grounds. Concepts work, because the environment is presented and displayed in them. Since nature has logical and mathematical properties, it is expedient to act as tho' it had;

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[1] James: *Meaning of Truth*, pp. 42 (note), 203; *Some Problems of Philosophy*, pp. 101–102 (italics mine). Cf. also *op. cit.*, p. 56; *Pluralistic Universe*, pp. 339–340 (note).

[2] James: *Some Problems of Philosophy*, pp. 51, 52.

while an intellect that was fatally predestined to falsify the environment would be as misleading to action as it would be inherently arbitrary and meaningless. And this realistic version of concepts is entirely consistent with a censure of their blind and uncritical use. Because nature is logical and mathematical, it does not follow that it is *merely* logical and mathematical. Such an intellectualism is vicious indeed. The abstracting of *some* characters of reality is beset by a characteristic danger, the danger of ignoring the rest. This follows from the fact that intellect is *selective;* it in no way implies that intellect is creative.

It is also true that in a sense the perceptual world is richer than the conceptual, since the latter is abstracted *from* it, leaving a residuum behind. James, it is true, goes further than this, and contends, with Bergson, that there are some properties of reality, the dynamic or temporal properties, which cannot be conceived. But this is due, I think, to a misunderstanding.[1] If to conceive is not to alter, but only to *distinguish*, then conceiving is not contrary to any property; to mention a property with a view to showing its inconceivability is to conceive it. And all properties stand on the same footing with reference to the function of mediation. All may be known mediately; but to know them mediately is only an indirect way of knowing them immediately. This is as true of a mathematical triangle, which is mediately known by means of these words, as of color, life, or anything else.

When corrected in the light of these considerations, the realistic anti-intellectualism of James escapes the verbalism and abstractionism of "vicious intellectualism," without that discrediting of analysis and lapse into uncritical intuitionism — that dissolution of order into chaos, which marks an even more vicious immediatism.

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[1] *Ibid.*, pp. 81, 104; cf. above, pp. 231 ff.

CHAPTER XI

PLURALISM, INDETERMINISM AND RELIGIOUS FAITH

Pluralism as the Sequel to Empiricism. The Additive Character of Knowledge

§ 1. WITH pragmatism as a theory of knowledge — a definition of truth, and a critique of intellectualism, there is allied a more or less clearly defined metaphysics. While this metaphysics is by no means systematic, it is distinct and characteristic enough to afford an interpretation of life, and even a religion. Since pragmatism, like idealism and realism, is primarily a theory of knowledge, and a metaphysics only by implication, we shall do well to follow this logical order in our exposition.

As furnishing the basis for a metaphysics and philosophy of religion, pragmatism may best be summed up by the term 'empiricism.' Pragmatism is empirical, in the first place, in that it limits the term 'knowledge' to the particular cases of human knowledge that may be brought under observation. Its theory of knowledge is a description of the manner in which you and I know, in this or that concrete situation. This is both the only knowledge which can profitably be in question, since it is the only knowledge that can be examined; and also the only knowledge on which we can count. Every theory that may be held is some particular body's particular theory. Even a theory concerning infinite or divine knowledge is first of all *your* theory or *mine*. And it follows that unless human knowledge is to be credited, we must be sceptics. In other words, if we exclude the sceptical alternative, and say that we mean nothing more by knowledge than the most reliable knowledge available, then we must identify knowledge with human knowledge. Such is knowledge — for better or for worse. No hypothetical knowledge can be more infallible or more certain than the processes of that human mind which defines, proves, and believes it. It follows that it is possible to know, as fully as it is possible to know at all, *a limited portion of reality.* If one were to assert that it is impossible fully to know anything without knowing everything — then that assertion itself would be discredited. It is itself a case of partial knowledge and is entitled to no special privileges.

Now if it is possible to know parts of reality without knowing all, it follows that such parts of reality are self-sufficient. If knowledge can be additive, if things can be known one at a time, then the things known must possess their natures independently. Thus one can know the laws of number, without knowing the date of Napoleon's birth. The latter knowledge, when obtained, is simply to be added to the former without modifying it. But this is equivalent to saying that Napoleon's birth is not a part of the nature of number. It is not asserted that one is not related to the other, but only that it is not germane, does not enter into its definition. And this, when generalized, is what is meant by *pluralism.* According to the opposite, or monistic, view, the *all*-relationship, the relation of each to all, is definitive; according to pluralism it is accidental. According to monism the *universal interrelationship* determines the essential nature of every item of being; according to pluralism certain limited relations sufficiently determine the nature of each thing, the residual relations being superfluous and unnecessary. According to monism the totality is more unified than the parts; according to pluralism the parts severally are more unified than the totality.[1]

Pragmatism thus credits finite knowledge, and asserts that knowledge grows from part to whole. Knowledge is cumulative; omniscience would be a sum of knowledge, a knowledge of *a and b*, in which the knowledge of *a* and *b* severally is prior to the knowledge of them together. And pragmatism infers that a universe in which this is possible is a universe in which there is at least some irrelevance or casual conjunction.

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[1] For pragmatist definitions of pluralism, see James: *Pragmatism,* Lect. IV. On the "monistic theory of truth," cf. below, p. 323.

Pluralism and External Relations

§ 2. But the empirical method contributes more direct evidence for pluralism in that such casual conjunctions are actually perceived. James, in particular, has emphasized the existence of *'external' relations*.[1]

Rationalism singles out and emphasizes the relations of logical implication and organic unity. Such relations are not to be denied; and it is in the interest of knowledge to discover them wherever they can be found. Indeed, the discovery of such relations may even be said to be the principal motive of thought. But a thorough-going empiricism will admit that such relations are never found except in the company of other relations. "Everything you can think of," says James, "however vast or inclusive, has on the pluralistic view a genuinely 'external' environment of some sort or amount. Things are 'with' one another in many ways, but nothing includes everything, or dominates over everything. The word 'and' trails along after every sentence."[2] In other words, internal definitive relationships are discriminated from casual relationships. Science distinguishes in connection with any subject of inquiry those things which are necessarily or functionally related, and which must therefore enter into the explanation, from those things which are there, and in some sense related, but which are negligible. Every definition, every determinate system, is obtained by exclusion as well as inclusion. The skilful scientific mind is the mind that readily fastens upon that which is germane, to the exclusion of that which is irrelevant. And empiricism is simply the willingness to accept facts, whether they be conjunctive or disjunctive. It recognizes behind the intellectual preference for unity, the more fundamental cognitive demand that things should be taken as they are — whether they satisfy that preference or disappoint it.

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[1] Cf., e.g., *Pluralistic Universe*, pp. 321–326, 358–361. Cf. below, p. 372.

[2] *Op. cit.*, p. 321.

Empirically, then, the world is a mixture of oneness and manyness, of relevance and irrelevance, of disjunction and conjunction, of essence and accident. On empirical grounds no other account is even plausible. And this has virtually been recognized even by the opponents of pluralism. Monism has not been offered as a faithful description of the world, judging by appearances, but as a necessary ideal that must be affirmed of the world *despite* appearances. The issue then turns upon the considerations already set forth in the discussion of absolutism.[1] Is the absolute world-system a *definite* ideal; and can it be shown to be implied in the act of knowledge, so that to doubt it is to affirm it? Pragmatism concludes, as we have been led to conclude above, that such a system is not only a dogma, but a vague dogma. As a sentiment it is intelligible; but as a hypothesis it is not only unverified but unverifiable. Owing to the extreme abstractness of the terms in which it is formulated, in so far as it is formulated at all, no crucial experiment can be devised which would decisively determine its truth or its falsity. Unformulated, it is a feeling for unity, a love of order, a "cosmic emotion." Thus 'the absolute' is either a superficial commonplace, to the effect that the world is one and interrelated, and is what it is; or a symbol of mystical reverence.

To find the native and distinguishing characters of *this* world, one must turn away from logical and mystical unities, and observe it in its characteristic physiognomy. It is a world that cannot be summed up in superlatives, without oversimplification or confusion. It has unity, but also variety; it is orderly, but only in a measure; it is good, but also in parts bad and indifferent. For better or for worse, it is just this homely, familiar old world, with some rhyme and some reason in it, but with much that is arbitrary and inconsequential. Such opportunity and hopefulness as it affords are limited; but they cannot be enjoyed more by exaggerating them. The rational life and true religion begin, as the natural life begins, not by taking the world to be the best, but by taking it *as it is*, and *making* the best of it.

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[1] See above, Ch. VIII.

Pluralism as a Philosophy of Religion

§ 3. It is evident that pluralism is readily convertible into a philosophy of religion. As a *Weltanschauung*, it evokes a characteristic practical response and inspires a characteristic faith.

In the first place, it applies directly to the problem of evil. On monistic grounds, the world must be approved or condemned as a unit. It is what it is, *through and through;* every characteristic that it manifests is implicated in every other characteristic. The meaning of the part must be sought in the whole. Such a theory overrules that empirical estimate of nature and of affairs which is the guide to action. The difference between goodness, evil, and indifference, which practice sharpens, is, in this type of theory, dulled. In a monistic philosophy *real* goodness is such as implies evil; *real* evil such as implies good; and *real* value and *real* indifference are reciprocally implicative. In other words, the real nature of each is revealed in its connection with the others. In practice, on the other hand, the real nature of each is intrinsic, the relation to the rest being accidental, circumstantial, or derogatory.

And this practical version of the matter constitutes the pluralistic philosophy of evil. It is not denied that good, evil, and indifference are related. It is not denied that value may come of indifference, or even good of evil. But it is denied such relations define and explain the terms. It is denied that value must be so defined as to embrace indifference, or good so defined as to provide for evil. Hence goodness is not to be *charged with* or *judged by* the evil that attends it. The pure nature of goodness is apprehended in proportion as evil is left out of the account.

An account of goodness with evil left out would not, it is true, be adequate to life; but it would be adequate to goodness. The mixture of the two — temptation and struggle, calamity and discipline, sin and repentance, is true to the historical drama of existence; but the nature of goodness itself is only confused by the admixture of its opposite.

The supposition that goodness must be defined in terms of life, and life in terms of the universal reality, has no support, save the monistic dogma. It rests on the more fundamental presupposition that the whole context must enter into the definition of each thing. Because goodness is opposed to evil and indifference, because the achievement of goodness is in certain cases conditioned by evil and indifference — it is inferred that goodness must *consist* in these. It may even be urged that because the pragmatist glorifies the humanization of nature and the victorious battle with evil, he is therefore a good monist; having reduced nature to humanity and good to evil.[1] Nothing could more unmistakably betray the monistic bias. To a mind habituated to monism, it is inconceivable that a thing should have any relation whatsoever to the subject of discourse, or should even be mentionable in the same connection, without entering into its definition and explanation. But does it follow that because nature can be humanized, this sequel is the secret of its existence; or that because a virtue can be made of necessity, that the necessity arose in order to be made a virtue of? It would be as reasonable to account for gold in terms of dollars; or to argue that because a man may be lifted from the mire, therefore mire is essentially that from which a man may be lifted, and hence a condition of the higher life.

Now it is this difference, which is so easily confused, and which may seem so slight as to be negligible, that nevertheless eventually brings pragmatism and monistic idealism into flat opposition. For pragmatism, the good is, as a matter of fact, related to evil, but is not *necessarily so;* it does not *derive its meaning from* the relation. For a monistic idealism, the circumstance of evil is *essential* to good. And no two religions could be more discordant, more incommensurable, than those which spring from these two theories. From the one springs the practical optimism, or meliorism, which stakes its hope on the chance that the world *may be made* better; from the other springs the contemplative or quietistic optimism, which consists in the faith that the world *is* best. For the former the realization of goodness is a future contingency; for the latter it is the eternal and necessary reality. For pragmatism the perfecting of the world is by elimination, there must be "real losses and real losers"; for a monistic idealism the perfection of the world lies in its all-preserving totality. For pragmatism, "evil is that which resists the evolution of the world, and fights a losing battle against the tendencies of things"; for a monistic idealism evil is a flavor to the sauce, or a rôle in the drama, which, though it is subordinate, cannot be dispensed with.[1]

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[1] It is in this sense that "Religious Idealism regards Pragmatism as an Idealism in the Making." Cf. W. R. Boyce Gibson, *God With Us*, p. 189; and Ch. X, *passim.*

The contrast appears finally and most vividly in the corresponding conceptions of God. For pragmatism, God is a part and not the whole. He is beneficent, without its being necessary to judge his beneficence by all the works of nature and life. "As God is not all things, He can be an 'eternal (*i.e.* unceasing) tendency making for righteousness,' and need not be, as on all other theories He must be, the responsible Author of evil."[2] In short, pragmatism justifies the ordinary procedure of the religious consciousness. For the religious consciousness is ordinarily selective and discriminating, construing God's nature in terms of goodness in the specific and exclusive sense, and proving him by an appeal to some, but not all, of the evidences of reality. In a monistic religion, on the other hand, God is "All," and his goodness must be interpreted accordingly.[1] He is such as mechanical nature, and evil, as well as the good contrasted with these, prove him to be. He is the universal life, the promiscuous totality of things, exalted into an object of worship; but not, as Plato would have said, without disloyalty to the moral will. For it is not possible in the long run to reverence one thing and serve another. And a worship which eulogizes the neutral mid-world of 'the spiritual life,' of 'struggle,' and of 'victory,' and erects it into the supreme object of admiration must, in the long run, convert moral effort into a conscious pose, and its Everlasting No into stage heroics.

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[1] James: *Pragmatism*, p. 296; cf. Lect. VIII, *passim;* and "The Dilemma of Determinism," and "Is Life Worth Living?" in *The Will to Believe;* F. C. S. Schiller: *Riddles of the Sphinx*, third edition, p. 353. For the monistic theory, cf. also above, p. 182.

[2] Schiller: *op. cit.*, p. 350.

Indeterminism as the Sequel to Pluralism

§ 4. Pragmatism implies pluralism, and this, as we have seen, affords a characteristic version of evil and of God. But pragmatists are not only pluralists; they are also indeterminists, and find in their indeterminism additional ground for a philosophy of religion. As will shortly appear, indeterminism is a more ambiguous and doubtful doctrine than pluralism, and may be approached in several ways.

In the first place, indeterminism may be regarded simply as an aspect of pluralism. The latter doctrine emphasizes both manyness and irrelevance; indeterminism singles out and emphasizes irrelevance. It means that there are relations which are not determinative; that there are juxtapositions of things and events which are actual but not necessary. In a narrower sense, indeterminism means that human individuals, and human actions, are disjunctively as well as conjunctively related to their environment or context. There is something in a man or in his deed that is not deducible from anything beyond. It is next to other things, along with them, related to them in many ways, but without following from them.

This is, I think, the meaning of James's "genuine possibilities."[1] It is primarily a denial of the counter-thesis that the world is pervaded by implication. There are arbitrary transitions as well as necessary transitions. In other words, there are situations of the type $a + b + c$, where c is not implied in $a + b$, and is not deducible therefrom. In such a situation, it is true to say that in respect of $a + b$, something other than c, such as d, is possible; or, that either c or d is consistent with $a + b$. After the fact, $a + b + d$ is as reasonable as $a + b + c$. It cannot be said that either c or d is exclusively determined by $a + b$; although it may be said that some more general character, m, of which c and d are the only instances, is thus determined, so that the possibilities are confined to c and d. In this sense, then, multiple possibility follows from pluralism.

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[1] Cf., e.g., Boyce Gibson, *op. cit.*, Ch. X.

Indeterminism and the Reality of Time

§ 5. Indeterminism in a still narrower sense, follows from the application of this general principle to time. In discussing the relation of pragmatist metaphysics to the concept of time, it is important to make a distinction. For there are really two issues involved.

In the first place, pragmatism, like naturalism, like all empirical philosophies, maintains that time is a fundamental property of existence. Thus pragmatism is opposed to all theories which claim to deduce time from something else; for example, from the nescience and relativity of the human mind. According to such a view, the temporal aspect of things is due to the modification of finite subjectivity. To reach truth means to escape this limitation and see things *sub specie eternitatis*. Thus according to the view held by Parmenides, Plato, Spinoza, and others, time is unreal; in the sense that it is one of the appearance-characters which reflective knowledge eliminates. Or time may be deduced from some higher logical or ethical category, as is attempted by some modern idealists. In this case, time is real, but only so far as it is a manifestation of some higher principle. Sequence is incidental to the dialectic of thought, or to moral progress.

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[1] Cf. "The Dilemma of Determinism," in *The Will to Believe*, pp. 155, 156; Schiller: *Studies in Humanism*, p. 404; Bergson: *Time and Free Will*, pp. 189–190.

Pragmatism, on the other hand, insists upon the original and irreducible character of time, as well as upon its peculiarly important part in existence. Time is more, and not less, original than dialectic and progress, since the latter contain the specific characters of sequence and change, and add further characters to them. And existence is the manifold that is *in* time, whether it exhibits these other characters or not. So that instead of saying that existence is a dialectical or ethical unity, embracing temporality, one must say that existence is the series of temporal events, with whatever of dialectical or ethical unity may happen also to be added. This, then, is the first issue; and the position of pragmatism is entirely unambiguous.

But it is a second issue, and not this issue, that raises the question of indeterminism. *How far is the series of temporal events determined?* The considerations just adduced afford no answer to this question. It is entirely possible to maintain the existential priority of time, and be a vigorous determinist as well. It is precisely such a blend of doctrines that is characteristic of naturalism. Pragmatism asserts "a really evolving, and therefore as yet incomplete, reality."[1] But so does naturalism. And the latter theory finds no difficulty in uniting with this assertion the further assertion that the evolution in question is strictly determined. The future cosmos is not yet; but will unfold, coincidently with the passage of time, according to the laws of physics.

Bergson makes much of the contention that "deep-seated psychic states occur once in consciousness and will never occur again."[2] The real temporal flux, revealed in the inner life, is a *growing old*, in which no phase can recur, because each phase is a résumé of the past. But this description would apply perfectly to a rigidly mechanical nature. It is entirely consistent with the mechanical theory that time is the 'independent variable.' The formulas of mechanics contain the time-variable, which means (as Bergson does not appear to recognize) *lapse* of time, together with other variables which are functions of the time-variable. As the value of the time-variable increases, the rest of the system alters according to the law which defines its relation to the time-variable. In other words, it *ages*, according to law. Such a process would be exemplified in the simplest conceivable mechanical system, that of a single body moving in infinite space at a uniform velocity. Mechanics does not assume the possibility of periodicity or recurrence, but only the possibility of the persistence of some abstract relationship among variables.[1]

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[1] Schiller: *op. cit.*, p. 392.

[2] Bergson: *op. cit.*, p. 219. Cf. also *Creative Evolution*, pp. 1–7.

Thus the pragmatist's assertion of the temporality of existence is entirely irrelevant to the question of its determination. A temporal existence may be a bare sequence of disjointed events, or a lawless flux of interpenetrating phases; or it may be an order which obeys a law. Which of these it is, must be judged by other evidence than its mere temporality. We are thus brought back again to the general pluralistic doctrine defined above. Since there are disjunctions in the world, these may occur between successive events as well as elsewhere. In other words, we may construe $a + b$ as prior in time to the c or d which are equally consistent with it. We may then say that at the moment when $a + b$ is completed by the addition of b to a, two futures are possible; in the sense that while m is implied, the implication does not determine whether it shall be m^c or m^d. So far as $a + b$, or any other attendant conditions are concerned, either will serve.

In this sense it is intelligible, and on pluralistic grounds correct, to say that there is a real contingency and novelty in the world. Events occur which not only have not occurred before, but which are not implied in what has occurred before. "Those parts of the universe already laid down" do not "absolutely appoint and decree what the other parts shall be."[1] Events occur which cannot be inferred from the past. To predict them, it would be necessary to foresee them. The possibility of such foresight does not contradict their contingency, any more than the bare perception of simultaneous events contradicts their disjunction. The essential point is that they are not implied in something else, but can be known only after the fact. An omniscient mind could know them only by knowing *each* of them, or embracing them in an empirical aggregate.

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[1] See above, pp. 56 ff.

It is to be observed that thus far indetermination adds nothing to pluralism. It justifies a belief in multiple possibility, and rids the mind of the necessity of judging everything in the world by everything else in the world. It justifies a worship of some things, and an uncompromising enmity to other things; and does not force man to take the world as all one, for better or for worse. It justifies a belief that the future holds in store things which cannot be inferred from what has already occurred; and hence the hope that the world may be better than its promise. It justifies an adventurous and hardy optimism, and puts the religion of renunciation and acquiescence among the obsolete superstitions. But despite all this it is none the less true that indeterminism in this general pluralistic sense contributes nothing toward proving human freedom. Such indeterminism attaches to man no more than to any other part of reality. It would be perfectly consistent with it that man should be less free than the planets. It proves that existence makes strange bed-fellows, and that the course of events is surprising. But it does not endow man, the moral agent, with any unique share in this disjunction and novelty; nor with any peculiar power to direct it or profit by it. There is an element of chance in life, but it is as likely to be the mishap of which man is the victim, as the opportunity of which he is the master.

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[1] James: *op. cit.*, p. 150.

Indeterminism as the Sequel to Anti-intellectualism. Will as itself the Author of Determinism

§ 6. But there are other pragmatist arguments for indeterminism which will perhaps yield a more positive freedom. Thus there is an indeterminism that follows from anti-intellectualism. It consists in the assertion that since determinism is a device of the intellect, it is relative to the interest which moves the intellect, and cannot therefore be imposed on life itself. Instead of being determined, the will is itself the author of the principle of determination; this principle is not its master, but its creature. Thus, according to Schiller, "determinism is an indispensable Postulate of Science." As such it "has primarily a *moral* significance; it is an encouragement and not a revelation." And "it is quite easy to accept it as a methodological assumption without claiming for it any ontological validity." Whether we accept this postulate or "the ethical Postulate of Freedom" is, in the end, "a matter of free choice," based on their relative serviceability.[1]

Such considerations as these support the indeterministic theory, only provided two further assumptions are made. In the first place, it must be assumed that the agency which formulates and employs a certain category cannot itself be subject to that category. This assumption plays, as we have seen, a notable part in idealistic philosophies,[2] — in all philosophies which seek to distinguish and separate the subject of knowledge from the manifold of objects. It is argued that known object implies knowing subject, and that to make this subject itself object is to displace and falsify it. The *real* subject is that which in every case of knowledge functions as subject. The application to the question of determinism is obvious. It is argued that things are determined by virtue of being objectified, and that the objectifying activity itself thus escapes determination.

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[1] *Studies in Humanism*, pp. 395, 396, 397, 394, 406.

[2] See above, p. 137; and below, pp. 295–296.

But there is no reason why the subject of knowledge should not *in turn* be object of knowledge; or why, indeed, it should not be object of knowledge (in relation to another subject) at the same time that it is subject of knowledge. It is necessary only to suppose that the same term may stand in two or more different relations without forfeiting its identity. And unless we are to discredit knowledge altogether we must suppose that the real nature of anything is revealed when it is object of knowledge, and in proportion as that knowledge is reflective and critical. It follows that the subject which objectifies other things, and renders them determinate, may itself be treated likewise; and that only when so treated is its real nature revealed. The subject is then free from determination only in so far as at any given time it is merely knowing and *not known.* Freedom in this sense is only a mode of nescience.

§ 7. The other assumption which is needed to complete the argument, is the assumption that laws are artificial.

Determinism as an Intellectualistic Falsification of Temporal Reality

In this application it means that determinism is a fabrication of the intellect, and imposed on a plastic material whose real inwardness it distorts.

The most notable criticism of determinism on these grounds is that offered by Bergson. It constitutes one of the major applications of his most fundamental and original thesis, to the effect that the intellect spacializes time, and so necessarily falsifies every temporal process by expressing it as a "multiplicity of juxtaposition." Real time (durée réelle) is "heterogeneous" and "continuous"; the real temporal process is a multiplicity of "interpenetration." Action, as a real temporal process, is spacialized and falsified by mechanism, by finalism, and even by the majority of indeterminists. By all such "intellectualists," action is represented as a discrete process, with its component elements and successive phases in external juxtaposition to one another. Time is represented as a linear series; and the conditions of action, the moment of choice, and the result of action, are all correlated with the terms of this series. But such a diagram is both discrete and static; whereas the real action *flows*, and *endures*. The intellectualistic representation necessarily excludes freedom, because it is the representation of a completed action, and not of an action as it goes on. It is impossible in this way to represent alternative possibilities; for the representation either contains both possibilities, and so is contrary to fact, or it contains one of them to the exclusion of the other, which contradicts the supposition of alternatives. And the finalistic scheme is as rigid as the mechanical scheme. For whether we conceive the later terms of the series as the sequel to the earlier, or the earlier as the foreshadowing of the later, in either case all the terms are *there*, in place, simultaneously and exclusively.[1]

Bergson's objection to the intellectualist's version of time rests, as we have seen, upon a mistaken conception of the intellectual or analytical method.[2] The spacial representation of time is intended to be a representation of order; and to be a representation of time in so far, and only in so far, as time is orderly. It is not intended to suggest either that time is nothing but order, or that time is spacial like the representation. The properties of order are the same, whether in space, number, the color spectrum, the alphabet, or time. The points on a line furnish a convenient case of order for purposes of demonstration; and their use doubtless reflects the spacializing propensity of the imagination. But if Bergson were a better pragmatist he would not assume, as he appears to do, that representations are mere reproductions of their objects. He would recognize the possibility of meaning non-spacial relations by spacial images. He would not insist, as he does, that we know number by "picturing" it; and that we cannot escape the characteristics of the graphic imagination. He would not fall into the loose common sense use of the term 'conceive' as *depict;* and thus perpetually confuse the arrangement of the instrumental image with the arrangement which it enables us to know.[1]

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[1] Bergson: *Time and Free Will*, pp. 121, 128, 129, 172 sq., and Ch. III, *passim*.

[2] See above, pp. 231 ff.

Indeed, if it were not possible to employ spacial images for the knowing of non-spacial things, Bergson himself would be even more helpless than those whom he criticizes. For his own favorite expressions are essentially spacial. What images do the words "flux," "continuity," "interpenetration," "deep-seated," "interconnexion," "organization," and "fusion," suggest, if not spacial images? And yet Bergson assumes that these images may so function as to afford knowledge of that which is essentially non-spacial. If a figure of speech can so function, is there any reason why a geometrical figure, or algebraic formula, should not? In short, Bergson arbitrarily imputes to his intellectualist adversary a naïve identification of object and symbol which he disclaims in his own behalf.

It is not a question, then, of imputing to time the arrangement characteristic of logical or mathematical *symbolism*, but of imputing to time certain *properties* which may be known by *means* of this symbolism. Is time an order, or is it not? Is duration an extensive magnitude, or is it not? Now the orderliness of time is implied in all that Bergson has to say about it, e.g., in its continuity, and in its duality of 'sense' or direction. While its multiplicity, even though it be characterized as "qualitative" rather than "juxtapositional," is orderly, in that if any phase, *a*, be later or older than another phase, *b*, and *b* than a third phase, *c*, then *a* is later or older than *c*. And as to time's being an extensive magnitude, Bergson's argument would appear to consist in pointing out that temporal *processes* are not *merely* extensive magnitudes; which no one, I think, would be disposed to deny. Velocity, e.g., is an intensive magnitude. But this does not in the least prevent its being a ratio of the extensive magnitudes, *d* (distance) and *t* (lapse, or interval of time). It may even be admitted that every temporal process or change, every function of time, has intensive magnitude; and this in no way contradicts the conception of time itself as an extensive magnitude. In other words, an intensive magnitude may be a function of extensive magnitudes, and may be computable or predictable in terms thereof.

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[1] *Time and Free Will*, p. 78.

That such is the case is proved by the predictions which science is actually enabled to make. Bergson's critique of astronomical prediction turns upon the assertion that the symbol *t* in the equations of astronomy "does not stand for a duration, but for a relation between two durations, for a certain number of units of time, in short, for a certain number of *simultaneities*."[1] In other words, the *t* of science is measured by some standard change, such as the motion of the hands of a clock. So that if a "mischievous genius" were to decree that all the movements of the universe should go twice as fast, the predictions of science would not be affected. Now, granting this, it follows only that science cannot predict absolutely, but only relatively. This, however, does not in the least detract from the precision of the prediction, nor from its reference to the future. Indeed the very statement of the objection assumes that time *is* an extensive magnitude. For if the movements of the universe may go "twice as fast," then it must be possible that the same distances should be covered in half the time. And if time can be halved it must be an extensive magnitude.

Subsequently, Bergson has the temerity to speak of a decree that *time itself* "shall go ten times, a hundred times, a thousand times as fast." Apparently the rate of real time is to be measured by the immediate feeling of the "enduring" or ageing of experience. If so, can Bergson explain, without making use of the conception of a pure extended time, what is meant by "a psychological duration *of a few seconds?*"[1] Or how temporal magnitudes are commensurable; how, e.g., two lives with different experiences may be regarded as synchronous? Or how *one day* may be regarded as fuller and richer than another? The fact is that no quantitative judgments whatsoever can be made concerning temporal processes that do not employ the notion of a simple extended (not spacial) temporal magnitude. And the predictions of science are made in terms of this component of change. The t of the equations of mechanics *means* this component.

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[1] *Op. cit.*, p. 193.

As we have seen, Bergson is constantly confusing the symbol with what it means. To one who falls into this confusion, it may appear that an equation cannot refer to time because the structure of the equation itself is not temporal; because the symbols are simultaneously present in the equation. But if t is one of the terms of the equation, and t *means* time, then the equation means a temporal process. Furthermore, an equation may define a relation, such as, $=$, $<$, or $>$, between temporal quantities, in which case the full meaning of the equation is still temporal. For changes, events, or even pure intervals, may stand in non-temporal relations, such as those above, without its in the least vitiating their temporality. The supposition that an equation defining a relation can mean no more than the relation defined is disproved by every formula of science. The formula, $c^2 = a^2 + b^2 - 2\,ab.\cos.\gamma$, does not mean merely equality, but a relation of equality *among the sides and an angle of a triangle.* The formula means something about triangles, by virtue of the meaning of its component variables, and despite the fact that the relation defined is the non-spacial relation of numerical equality. And similarly, a formula in dynamics, such as $v = gt$, means *something about a temporal process.*

There remains one further instance of Bergson's failure to represent with any correctness the position of his deterministic opponent. It is a question of Paul's ability to predict Peter's choice, provided he knows "*all* the conditions under which Peter acts."[1] Bergson argues that in order to know absolutely all of the conditions under which Peter acts, and to know all about these conditions (including what they lead to), Paul would have to *be* Peter, up to and including the moment of his choice — so that instead of predicting the choice, he would be himself making it.

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[1] *Op. cit.*, pp. 193, 194.

But determinism does not rest its case on the possibility of knowing all the conditions of an event. No such knowledge has ever been attained in any instance. Determinism rests its case upon the fact that it has sometimes proved possible to find *just those particular conditions* upon which the event depended. Prediction always abstracts, not only causes, but effects as well. It finds cases of specific, discriminated terms, antecedent and subsequent, that are connected by a law. Its prediction is based on the specific antecedent, and confined to the specific consequence. It assumes that whenever such and such conditions occur, whatever else may occur, such and such consequences will ensue, whatever else may ensue. And Bergson has offered no reason for supposing that such is not the case with human action, as well as with other temporal sequence. As a matter of fact, it is the case. Human action *is* predictable within limits; inasmuch as laws, such as those of physiology, pathology, and psychology, have been found and verified. So that Bergson's objection amounts to no more than the contention that human action is not in all respects predictable, which holds equally of every other concrete event.

Thus the indeterminism that is founded on the polemic against intellectualism, like that founded on pluralism, means only that there is disjunction, irrelevance, and novelty in the world, as well as law. Such indetermination is enjoyed by life and moral action no more than by its natural environment. There is thus far no ground for imputing to man any prerogative of freedom, by which his nature is distinguished and exalted. Indeterminism in such a positive and eulogistic sense depends entirely, then, on the further doctrine that man possesses a unique activity, a real causality of another order, through which he may be the original and spontaneous author of events.

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[1] *Op. cit.*, pp. 185, and sq.

Freedom as Creative Activity

§ 8. Pragmatism's positive version of freedom follows from the postulate of "dynamism," as opposed to "mechanism." "Dynamism starts from the idea of voluntary activity, given by consciousness," and "has thus no difficulty in conceiving free force." From this point of view, "the idea of spontaneity is indisputably simpler than that of inertia, since the second can be understood and defined only by means of the first, while the first is self-sufficient." Similarly, Schiller says that the will is "the original and more definite archetype, of which causation is a derivative, vaguer and fainter ectype." [1]

Bergson has stated the issue clearly. It is essential to his view that the free creative activity of will should be regarded as a simple and self-sufficient experience. There is, it is true, a suggestion of another view. We are told that the free act is the act of which the "self alone" is the author; the act which expresses "the whole of the self," as distinguished from "reflex acts." [2] But for Bergson the whole of the self is not the sum of its parts; so that it is impossible to construe its action as a more complicated or massive reflex. The "whole personality" is indivisible and unanalyzable; it appears only when conscious states dissolve into a higher unity, and its action can only be felt and not traced.

And this self-intuiting activity becomes the first principle of Bergson's metaphysics. It connects his theory of knowledge with his theory of will. True knowledge is "that faculty of seeing which is immanent in the faculty of acting." And activity is the universal substance. Strictly speaking, "there are no things, there are only actions." Activity is no longer predicated merely of the organism as distinguished from the environment. As the former is a reality which makes itself, the latter is "*a creative action which unmakes itself*." If life is a movement, "materiality is the inverse movement." They are two "undivided" currents, two "simple" movements, that run counter to one another. And "God thus defined has nothing of the already made; He is unceasing life, action, freedom. Creation, so conceived, is not a mystery; we experience it in ourselves when we act freely."[1] Thus the sequel to the postulate of 'dynamism' is a metaphysical 'activism' or creationism; and in so far as pragmatism assumes this form, it allies itself with the voluntaristic and romanticist forms of idealism.

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[1] Bergson: *op. cit.*, pp. 140–142; Schiller: *Riddles of the Sphinx*, third edition, p. 443. Cf. Appendix I, *passim*. For James's more critical and limited acceptance of the same view, see below, pp. 352–353, 371.

[2] *Time and Free Will*, pp. 165, 166, 168.

The sole support of this metaphysics and philosophy of religion is the postulate of dynamism. If it be true that the essential nature of causality is revealed in the experience of activity, then it follows that physical causality is only a projection or inversion of will. Criticism, then, must challenge the postulate. And, first of all, it is to be pointed out that the *origin of the idea of causality* is an irrelevant consideration. The causation exercised by the will may have been the first to attract attention, and it may remain the most familiar instance; but it does not follow that causation was first *understood* in the case of the will, or that the will is the *clearest* instance of it. As the first and most familiar instance, it may be the most primitive and ill-comprehended. It may be the instance to which crude and uncritical modes of thought are, through the operation of habit, most firmly attached. This suggestion receives support from the fact that the experience of activity is held to reveal the operation of a simple, free, and spontaneous "force," just in proportion as *it is not analyzed*. "The self, infallible when it affirms its immediate experiences, feels itself free and says so; but, as soon as it tries to explain its freedom to itself, it no longer perceives itself except by a kind of refraction through space."[1]

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[1] *Creative Evolution*, pp. 250, 247, 248, 249, 248. For the idealistic form of activism, see above, pp. 150–154.

This is Bergson's way of acknowledging that the experience, whether for better or for worse, *can* be analyzed. Now it has already been pointed out that there is a very significant difference between the simplicity that precedes, and that which follows, analysis. The first is the simplicity of knowledge that has not yet fully explored and grasped its object; the second is the simplicity of the object. The knowledge of anything whatsoever is simple at the instant of its initiation; it begins at zero, or spreads from a point which is the bare denoting of its object. To attribute this accidental and subjective simplicity to the object is to fall into the error which I have called the error of 'pseudo-simplicity.'[2] "Dynamism" depends upon this error. It unites the multiplicity of activity as a process, the multiplicity which it reveals upon even the most cursory examination, with that phase of knowledge in which analysis has not yet begun. The as-yet-simple knowledge of a complex thing is converted into a thing which possesses a complex simplicity or simple complexity.

This is not the same as to say that activity is indefinable. It is not *shown to be* simple, in the sense of having been tested and found unanalyzable. It is not an ultimate term. As a matter of fact activity has proved definable, both psychologically and physically. Pragmatists, like James, have gone far toward defining subjective effort;[3] and rational dynamics contains exact formulations of 'force' and 'energy' in the physical sense. No, — one must not *attempt* to define it; it is essentially a something-not-yet-defined. In short, it is nescience presented in the rôle of a revelation of reality. To lapse from knowledge into nescience is always possible, — there is no law of God or man forbidding it. But to offer nescience as evidence of the nature of anything, to rank nescience above knowledge for *cognitive* purposes, is to obtain immunity from criticism only by forfeiting the right to a respectful hearing.

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[1] Bergson: *Time and Free Will*, p. 183.

[2] See above, pp. 128–132.

[3] Cf. James: "The Experience of Activity," in *A Pluralistic Universe*, Appendix B. Cf. below, pp. 352–353.

Pragmatism thus offers two versions of indeterminism. On the one hand it is argued on pluralistic grounds that necessity is not all-pervading. There are dislocations in the universe, that make it possible to judge parts of it — such as its good, its evil, and its indifference — independently. It is possible to attack evil in behalf of good, without the sense that one's client is guilty of complicity. Reality is not a conspiracy; the game is not "fixed"; the world in the all-inclusive sense is a contact of strange things, a shock of independent forces; the adventure of life is an honest warfare.

On the other hand, it is argued by pragmatists of the radical wing that there is in man an indeterminate, incalculable, and creative power to do. But the proof of it requires the abandonment of every tried method of knowledge — both the logical method of "intellectualists," and the observational, experimental method which pragmatists themselves have so successfully practised on every occasion but this. Radicalism of this type is not only unreasonable and unverifiable, but it destroys the originality and distinction of pragmatism and allies it with forces of romanticism, mysticism, and irrationalism.[1]

§ 9. In a résumé of pragmatism Papini alludes to its attitude toward religious questions as "*fideism.*"[2] By this is meant its application of the pragmatic theory of truth to the case of religious belief. Here again we shall find it important to distinguish between the more moderate pragmatism, represented by James, and the more radical pragmatism, represented in this case by Papini, LeRoy, and Schiller.

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[1] There is a positive sequel to pluralistic indeterminism, which does not involve these excesses. Cf. below, pp. 340–342.

[2] Cf. G. Papini: *Il Crepuscolo dei Filosofi;* James: "G. Papini and the Pragmatist Movement in Italy," in *Jour. of Phil, Psych., and Scientific Methods*, Vol. III, 1906.

The Pragmatic Theory of Truth Applied to Religious Faith

James's view is expounded in his essay "The Will to Believe," and in the more recent "Faith and the Right to Believe." [1] He contends that in the case of religion we are warranted in adopting that belief which is most in accord with our hopes, and which gives most firmness and courage to the moral will, even though the belief is not decisively proved. James does not advance this view on the general ground that we may believe what we wish, but on the ground of the special circumstances peculiar to religious belief. To state the issue clearly we must recall the pragmatic theory of truth.[2]

Ideas or beliefs are essentially instruments of meaning. They are good instruments in so far as they afford access to their objects, and the test of their goodness in this sense is to try them; i.e., employ them as means of access. If they present to the mind what they have led the mind to expect, they are true. But ordinarily one does not use ideas merely to test them; one assumes their reliability and employs them in the affairs of life. And if they work here, they receive additional verification; for if they were not good substitutes for parts of the environment, they would not fit in with the rest of the environment. But ideas acquire still a third variety of value through their immediate agreeableness, or their power to impart vigor to the agent. In other words, they possess a *sentimental* or *emotional* value. This sentimental value, unlike their operative value, does not confirm their primary value as representations or means of access to things. A highly agreeable or inspiring idea, or a belief that disposes the mind to peace and contentment, may be of all ideas the least fitted to prepare the mind for what is to befall it. In other words, such emotional value is irrelevant to truth-value, in the strict sense. But there are cases in which this emotional value may nevertheless be allowed to weigh and to determine the acceptance of belief. And religion is such a case.

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[1] Published as an Appendix to *Some Problems of Philosophy*. For further references to James, see below, pp. 367–368.

[2] Cf. above, pp. 203 ff.

For here the idea cannot be decisively tested by the other means. It is impossible to verify or disprove its truth, in the strict sense. The evidence remains indecisive. If one were governed only by 'theoretical' considerations, one would be compelled to suspend judgment. But that is impossible. Some plan of action with reference to the world at large, whether it move one to hope or despair, *must* be adopted. There is a "forced option." If one scrupulously refrains from taking the hopeful view, one inevitably falls into renunciation or despair. But these are no better justified, theoretically, than hope; indeed, they are *less* justified, for there is a balance of probability in favor of religion. It would be folly, then, to allow one's "logical scrupulosity" to drive one to renunciation or despair. Furthermore, if one's religious belief refers to the future, and if the belief moves one to action, the very acceptance of it tends to bring about its truth. Hopefulness may lead to the fulfilment of hope.

In this view the distinction between the theoretical test of truth, and the emotional justification of belief, is renewed and emphasized at every step. The emotional value is not offered as evidence of truth, but as justifying belief where truth is doubtful. But the second or radical view, on the other hand, *merges* these two tests, the narrower truth-test and the emotional test. Both tests are "practical"; both are cases of "working"; both are cases in which the idea is justified by the "satisfaction" it yields. Truth, in the broad sense, is that which "harmonizes" with life all around. No pessimistic system can be true in this sense because it leaves "a sense of final discord in existence." The final test of religion, then, is its promotion of "that perfect harmony of our whole life which forms our final aspiration."[1]

Now such a view as this has very serious implications, and justifies a certain prejudice against pragmatism as a philosophy of caprice and wanton irrationalism. For if the test of truth is this general harmony with interests, the cognitive interest being only one among the rest, then verification in the narrow sense, and emotional congruity, must be regarded as commensurable. And it follows that in any given case the latter may outweigh the former. It is even conceivable that a religious belief should be so pleasing and inspiring as to be true, despite its being decisively disproved by theoretical means. With James the theoretical test is final and authoritative, in so far as it can be applied, and no amount of subjective satisfactoriness can overbalance it. The right to believe is limited to the cases in which evidence is lacking or indecisive. But were the full implications of the radical view to be accepted, there would be a right to believe *despite* evidence. There would be an end of discussion, and only a clash of desires; in which the desire for theoretical truth could be legitimately shouted down by the clamor of the rest.

Pragmatism and the Spirit of the Age

§ 10. Pragmatism, both of the more moderate type, represented by James, and in the main by his American allies and followers, or the more radical type, represented by Bergson, Schiller, Papini, and LeRoy, is peculiarly significant of the present age. Negatively, it is significant of the reaction against absolutism, long enthroned in academic and other orthodox circles. It signifies that the spell which absolutism has long wrought upon the minds of inquiring and youthful thinkers has lost its power. More positively, pragmatism marks the maturing and the express formulation of certain ideas that have long inspired European thought.

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[1] Schiller: *Humanism*, pp. 50, 61; cf. pp. 39 sq., 189. Cf. also above, pp. 209, 213.

In the first place, pragmatism employs for philosophical purposes what may be termed the 'biological' imagination, as distinguished from the logical, the physical, and the introspectively psychological. Pragmatism views knowledge and religion as modes of life; and life it conceives not in any vague eulogistic sense, but in the naturalistic sense, as an affair of forced adaptation to an indifferent and, at best, reluctantly plastic environment. Knowledge and religion arise from the exigencies of life, and the exigencies of life are real, perilous, and doubtful.

In the second place, pragmatism emphasizes the crucial importance of human efforts. It teaches that the spiritual life is in the making at the point of contact between man and the balance of nature — between the ideals of man, and the resistances, cruelties, and seductions with which they are forced to cope. The hope of better things lies in the continued operation of the forces that are even now yielding good things. *Civilization*, not the totality of nature, nor any higher synthetic harmony, is the work of God. This is the Baconian prophecy renewed. Through the knowledge that is power, and guided by his desire and hope of better things, man may conquer nature and subdue the insurrection of evil.

Thirdly, since man's efficiency lies in his collective and not in his individual action, pragmatism emphasizes society. It is non-pantheistic and non-mystical. It attaches less significance to the direct relation between man and a dynastic God, and more to that relation to his fellows which may make a man a servant of the collective life, and so lead him to a new conception of God as leader of common cause.

And finally, pragmatism is melioristic. It speaks for the spirit of *making better*, and denounces alike the spirit of renunciation and the spirit of despair. It is the philosophy of impetuous youth, of protestantism, of democracy, of secular progress — that blend of naïveté, vigor, and adventurous courage which proposes to possess the future, despite the present and the past.

PART V

REALISM

CHAPTER XII

A REALISTIC THEORY OF MIND

I. INTRODUCTORY

Realism as a Polemic

§ 1. REALISM has thus far appeared in these pages mainly as a polemic. This polemic may conveniently be summarized in terms of the general errors of which it finds rival tendencies to be guilty.[1]

'Argument from the ego-centric predicament,' that is, from the circumstantial presence of the knower in all cases of things known, is peculiar to idealism. 'Definition by initial predication,' the assumption of the priority of a familiar or accidental relationship, is based on the more fundamental error of 'exclusive particularity,' or the supposition that an identical term can figure in only *one* relationship. These two errors together appear in all *exclusive* philosophies, such as dualism, and monisms of matter or mind. The error of 'pseudo-simplicity,' which amounts virtually to the abandonment of analysis, and the notion of 'indefinite potentiality,' which is the sequel to the last, are characteristic of 'substance' philosophies, and especially of all forms of 'activism,' whether naturalistic, idealistic, or pragmatistic. The 'speculative dogma,' the assumption of an all-general, all-sufficient first principle, is the primary motive in 'absolutism.' Finally, the error of 'verbal suggestion,' or 'equivocation,' is the means through which the real fruitlessness of the other errors may be concealed, and the philosophy employing them given a meretricious plausibility and popular vogue.

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[1] The full statement of these errors will be found above, especially pp. 64–68, 126–132, 169–171.

As has already appeared, realism is nevertheless in agreement with naturalism, idealism, and pragmatism respecting many important doctrines. With naturalism, for example, it maintains the unimpeachable truth of the accredited results of science, and the independence of physical nature on knowledge; with idealism it maintains the validity and irreducibility of logical and moral science; and with pragmatism, the practical and empirical character of the knowledge process, and the presumptively pluralistic constitution of the universe.

A new movement invariably arises as a protest against tradition, and bases its hope of constructive achievement on the correction of certain established habits of thought. Realism is as yet in a phase in which this critical motive dominates and affords the best promise of initial agreement. But war has developed a class consciousness, and the time is near at hand, if, indeed, it has not already arrived, when one realist may recognize another. This dawning spirit of fellowship, accompanied as it is by a desire for a better understanding and a more effective coöperation,[1] justifies an attempt to summarize the central doctrines of a constructive realistic philosophy.

Fundamental Importance of the Problem of Mind

§ 2. The crucial problem for contemporary philosophy is the problem of knowledge. It is upon this question that its chief tendencies divide, and it is from their several solutions of this problem that these tendencies derive their characteristic interpretations of life. In giving a brief outline of a realistic philosophy, I shall therefore have to do mainly with the realistic theory of knowledge. I propose, however, to adopt a somewhat novel order of procedure. The problem of knowledge reduces, in the last analysis, to the problem of the relation between a mind and that which is related to a mind as its object. The constant feature of this relationship is *mind*. Instead, therefore, of dealing first with knowledge, leaving mind to be defined only incidentally or not at all, I propose first to discover what manner of thing mind is, in order that we may profit by such a discovery in our study of knowledge.[1]

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[1] Cf. "The Program and First Platform of Six Realists," by E. B. Holt, W. T. Marvin, W. P. Montague, R. B. Perry, W. B. Pitkin, and E. G. Spaulding, *Jour. of Phil., Psych., and Scientific Methods*, Vol. VII, 1910; and the volume entitled *The New Realism*, by the same writers. Cf. also the author's "Realism as a Polemic and Program of Reform," *Jour. of Phil., Psych., and Scientific Methods*, Vol. VII, 1910.

Accounts of mind differ characteristically according as they are based on the *observation* of mind in nature and society, or on *introspection*. What is said of mind by historians, sociologists, comparative psychologists, and, among technical philosophers, most notably by Plato and Aristotle, is based mainly or wholly on general observation. Mind lies in the open field of experience, having its own typical form and mode of action, but, so far as knowledge of it is concerned, as generally accessible, as free to all comers, as the motions of stars or the civilization of cities. On the other hand, what is said of mind by religious teachers, by human psychologists of the modern school, whether rational or empirical, and, among technical philosophers, by such writers as St. Augustine, Descartes, and Berkeley, is based on self-consciousness. The investigator generalizes the nature of mind from an exclusive examination of his own.

The results of these two modes of inquiry differ so strikingly as to appear almost irrelevant, and it is commonly argued that it cannot be mind that is directly apprehended in both cases. It is assumed, furthermore, that one's own mind, or the mind at home, must be preferred as more genuine than the mind abroad. The conclusion follows that the latter is not mind at all, but a mere exterior of mind, serving only as a ground for inference. Thus we reach the widely popular view that mind is encased in a non-mental and impenetrable shell, within which it may cherish the secret of its own essence without ever being disturbed by inquisitive intruders. Now one might easily ask embarrassing questions. It is curious that if its exterior is impenetrable a mind should give such marked evidence of itself as to permit the safest inferences as to its presence within. It is curious, too, that such an inward mind should forever be making sallies into the neighborhood without being caught or followed back into its retreat. It must evidently be supplied with means of egress that bar ingress, with orifices of outlook that are closed to one who seeks to look in. But rather than urge these difficulties, I shall attempt to obviate them. This is possible only through a version of the two minds, the mind within and the mind without, that shall prove them to be in reality one. To unite them it is necessary to replace them by *the whole mind*, in which they appear plainly as parts. The traditional shield looks concave on one side and convex on the other. That this should be so is entirely intelligible in view of the nature of the entire shield and the several ways in which it may be approached. The whole shield may be known from either side when the initial bias is overcome. Similarly, I propose to describe the mind within and the mind without as parts of mind, either of which may assume prominence according to the cognitive starting-point; the whole mind by implication lying in the general field of experience where every initial one-sidedness may be overcome.

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[1] Cf. my article "A Division of the Problem of Epistemology," *Jour. of Phil., Psych., and Scientific Methods*, Vol. VI, 1909. The remainder of the present chapter is reprinted in part from a series of articles entitled "The Hiddenness of Mind," "The Mind's Familiarity with Itself," and "The Mind Within and the Mind Without," *Journal of Phil., Psych., and Scientific Methods*, Vol. VI, 1909, Nos. 2, 5, 7.

In addition to this difference of method, there is another distinction that it will prove not only convenient to employ, but important to emphasize — the distinction between the *action* and the *content* of consciousness. Every type of consciousness exhibits this duality. There is 'thinking' and 'thought,' 'perceiving' and 'percept,' 'remembering' and 'memory.' A similar duality between sensing and sense-content accounts for the ambiguity of the term 'sensation.' In the discussion that follows I shall employ first the method of introspection and then the method of observation; examining by each method, first, the contents of mind, and second, the action of mind.

II. The Method of Introspection

Mental Content as Revealed by Introspection

§ 3. It is well known that much the most convenient method of discovering *what is in* my mind is to consult me. I can affirm the fact with superior ease and certainty. At the same time, of course, I may be absolutely ignorant of the meaning of the fact. The subject of a psychological experiment is best qualified when he has no ideas concerning the nature of his mind. He is called on to affirm or deny awareness of a given object, to register the time of his awareness, or to report the object (not given) of which he is aware. Introspection thus yields an identification and inventory of mental contents.

Suppose my mind to be an object of study. In the first place, it is necessary to collect my past experiences. For this purpose the method of introspection is convenient and fruitful. I have myself been keeping a record of my experiences automatically, and by virtue of the capacity of recollection I can recover them at will. This method is reserved for the use of the mind that originally had the experiences. This does not mean that the facts cannot be known except in so far as remembered by me. It would be absurd to say that the fact that I saw the King of Saxony in the year 1903, is lost to knowledge except in so far as I can retrospectively recover it. An observant bystander would have known it at the time, or it may be a matter of general knowledge. But the convenience afforded by my memory is apparent. For in this way I may recall and verify the experience in question, and thus secure something approximately equivalent to its empirical presence; and, furthermore, my memory preserves not only this, but also other experiences likewise mine, and so already selected and grouped with reference to a study of my particular mind.

Or, suppose that the study of my mind requires knowledge of its *present* content. I, who must in the nature of the case be having the object in mind, can have before me simultaneously the additional fact of its being in my mind. Such an introspective experience is commonly available, and while it is not a penetrating or definitive *knowledge* of the fact, it *is* a *discovery* of the fact.

It is doubtless true, then, that a record of the contents of a mind is most conveniently obtained by introspection. This superior or even unique accessibility of certain facts to certain observers is not unusual; indeed, it is a corollary of the method of observation. Every natural object has what may be called its cognitive orientation, defining vantage points of observation. Data concerning the surface of the earth are peculiarly accessible to man, and data concerning the twentieth century to those alive at the time. But this does not mean that man knows the earth best, or that we of the present day know the twentieth century best. Still less does it mean that our knowledge is exclusive. It means only that we are so situated as to enjoy certain *inductive advantages*. If a man were to add up his property as he accumulated it, he would always be in a position to report promptly on the past and present amount thereof; but it would not be profitable to argue that property is, therefore, such as to be known only, or even best, by its owner. So any individual mind is most handily acquainted with its own experiences, past and present. The circumstances of its history and organization are such that without any exertion, or even any special theoretical interest, it is familiar with the facts. But this argues nothing unique or momentous. It may easily be that while introspection is the best method of collecting *cases* of mental content, it is the poorest method of defining their nature.

The Neutral Elements of Mental Content. The Need of a Unifying Relation

§ 4. When I attempt to discover the generic character of the contents revealed by introspection, I meet at once with a most significant fact. *Distributively*, these contents coincide with other manifolds, such as nature, history, and the contents of other minds. In other words, in so far as I divide them into elements, the contents of my mind exhibit *no* generic character. I find the quality 'blue,' but this I ascribe also to the book which lies before me on the table; I find 'hardness,' but this I ascribe also to the physical adamant; or I find number, which my neighbor finds also in his mind. In other words, the elements of the introspective manifold are in themselves neither peculiarly mental nor peculiarly mine; they are *neutral and interchangeable.*

It is only with respect to their grouping and interrelations that the elements of mental content exhibit any peculiarity.[1] When my attention is directed to this, I find that mental contents, as compared, for example, with physical nature, possess a characteristic fragmentariness. *Not all* of physical nature, nor of any given natural body, is in my mind. And the particular abstract that is in my mind does not exactly coincide with the particular abstract that is in my neighbor's mind. Furthermore, the fragments of nature that find their way into my mind acquire thereby a peculiar interrelation and compose a peculiar pattern.

The so-called "relational theory of consciousness" has emphasized this fact that mental content is distinguished, not by the stuff or elements of which it is composed, but by the *way* in which these elements are composed; in other words, by the composing relation. "In consciousness," says Professor Woodbridge, "we have simply an instance of the existence of different things together, . . . consciousness is only a form of connection of objects, a relation between them." As James expresses it, "consciousness connotes a kind of external relation, and does not denote a special stuff or way of being."[1] Neither of these authors, however, offers a clear account of what this peculiar relation or form of connection is. James at times identifies it with "the function of knowing." When one thing *means* or *represents* another, and thus assumes the status of idea, it becomes a conscious element. But, as Professor Woodbridge points out, this relation can scarcely be the *generic* relation of consciousness, because the terms between which it holds are already 'experienced.' And James himself explicitly recognizes the possibility of immediately experiencing, without the mediation of ideas at all. 'Meaning' would seem to be the relation characteristic of *discursive* consciousness, rather than of consciousness in general. As respects such a general type of relationship, the results are on the whole negative. James shows that it is *different* from the physical type of relationship ("mental fire is what won't burn real sticks"). Professor Woodbridge "lays greater stress on what consciousness does not appear to be than on . . . that type of connection which it constitutes between objects."[2]

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[1] For a more ample treatment of this matter, cf. my article, "Conceptions and Misconceptions of Consciousness," *Psychological Review*, Vol. XI, 1904.

Now what light do such results throw on the nature of mind? It seems to me clear that they contribute only a preliminary induction. They doubtless afford unmistakable evidence of a special and important grouping of objects; but *they do not reveal the principle which defines the group*. It is admitted that contents of mind coincide distributively, or element for element, with parts of nature. It is important, then, to show how parts of nature become contents of mind. Natural objects do not enter wholly into mind. Then what determines their foreshortening and abridgment? An individual mind gathers into itself a characteristic assemblage of fragments of nature. Under what conditions does this occur? When things are in mind, one may mean or represent another. What constitutes *being in mind?*

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[1] F. J. E. Woodbridge: "The Nature of Consciousness," *Jour. of Phil., Psych., and Scientific Methods*, Vol. II. 1905, pp. 120, 125; James: "Does Consciousness Exist," in the same Journal, Vol. I, 1904, p. 486. Cf. also B. H. Bode: "Some Recent Definitions of Consciousness," *Psychological Review*, Vol. XV, 1908.

[2] Woodbridge: *loc. cit.*; James. *op. cit.*, pp. 478, 489. For the pragmatist view of discursive consciousness, cf. above, pp.200 ff. For James's more complete view, cf. below, pp. 350–354.

Until such questions are answered realism cannot boast of having greatly improved upon idealism. "Consciousness," says Professor Natorp, "is inexplicable and hardly describable, yet all conscious experiences have this in common, that what we call their content has this peculiar reference to a center for which 'self' is the name, in virtue of which reference alone, the content is subjectively given, or appears." It is as important for the realist to show what he means by his "form of connection" as it is for the idealist to show what he means by "this peculiar reference to a center."[1]

Mental Action. The Alleged Self-intuition of a Pure Spiritual Activity

§ 5. We shall find that it is impossible to find the common bond of things mental, until we abandon the introspective method and view mind as it operates in the open field of nature and history. But before adopting this course we have two other alternatives.

In the first and more popular of these alternative views, it is admitted that it is impossible to find a unique quality in mental contents, or even a unique interrelation among them. It is maintained that things derive their mental character from that which *acts on them.* My contents are the passive objects of my active perceiving, thinking, or willing. This action of mind is not itself content, but is the common and unifying correlate of all content. So far this view is, I think, substantially correct. The defining relation of mind is a kind of action, and it will not be found amidst the content which it defines. But in the present view it is further maintained that the action of mind is nevertheless *introspectively accessible in a peculiar way.*

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[1] Paul Natorp: *Einleitung in die Psychologie*, pp. 14, 112; quoted by James, *op. cit.*, p. 479.

I refer to the time-honored theory that the action of mind is revealed to the agent himself in an immediate intuition. "Such is the nature of Spirit, or that which acts," says Berkeley, "that it cannot be of itself perceived . . . though it must be owned at the same time that we have some *notion* of soul, spirit, and the operations of the mind." The inner activity of consciousness is that "life-form of immediate reality" which "is lost if the psychological abstractions make it a describable object." [1]

Berkeley's view met its classic refutation in Hume. He showed that the most exhaustive introspective analysis reveals no such 'creative power,' but only a manifold and nexus of contents. Taken "psychologically," says Mr. Bradley, "the revelation is fraudulent. There is no original experience of anything like activity." The supposition that there is such a revelation is possible only provided one refuses to analyze a certain experience into its elements. When the so-called experience of mental activity *is* so analyzed, no activity-element is found. The refusal to analyze what can be and has been analyzed cannot be justified by any canon of rigorous theoretical procedure.[2] In other words, the intuitionist theory of mental activity is an instance of the fallacy of 'pseudo-simplicity.' "The simplicity, however, of the representation of a subject is not therefore a knowledge of the simplicity of the subject," says Kant. The intuitionist argument rests upon a confusion between the lack of complexity in the *knowledge* of the subject matter, and a lack of complexity in the subject matter itself.[3]

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[1] Berkeley: *Principles of Human Knowledge,* Fraser's edition, Vol. I, p. 272; Münsterberg: *The Eternal Values,* p. 393.

[2] Hume: *Enquiry concerning Human Understanding.* Section VII, Part I, *passim;* Bradley: *Appearance and Reality,* p. 116.

[3] Kant: *Critique of Pure Reason,* trans. by Max Müller, Second Edition, pp. 289–290. Cf. above, pp. 261–264.

Philosophy is peculiarly liable to this fallacy in the case of self-knowledge, because of the extraordinary familiarity of 'self.' No one is so well acquainted with me as I am with myself. Primarily this means that whereas I have known myself repeatedly, and perhaps for considerable intervals continuously, others have known me only intermittently or not at all. To myself I am so much an old story that I may easily weary of myself. I do weary of myself, however, not because I understand myself so well, but because I live with myself so much. I may be familiar to the point of *ennui* with things I understand scarcely at all. Thus I may be excessively familiar with a volume in the family library without having ever looked between the covers. Indeed, degrees of knowledge are as likely to be inversely, as directly, proportional to degrees of familiarity. Familiarity is arbitrary like all habit, and there is nothing to prevent it from fixing and confirming a false or shallow opinion. The man whom we meet daily on the street is a familiar object. But we do not tend to know him better. On the contrary, our opinion tends to be as unalterable as it is accidental and one-sided. Everyone is familiar with a typical facial expression of the President, but who will claim that such familiarity conduces to knowledge of him? Similarly my familiarity with myself may actually stand in the way of my better knowledge. Because of it I may be too easily satisfied that I know myself, and will almost inevitably believe that my mind as I commonly know it is my mind in its essence. It cannot be said, then, that the individual mind's extraordinary familiarity with itself necessarily means that its knowledge of itself is exclusive or even superior. On the contrary, it means that in respect of knowledge of itself every mind is peculiarly liable to *over-simplification* — to the assumption that knowledge is complete when, as a matter of fact, it has not yet begun.

These considerations also discredit, I think, the virtue so frequently attributed to self-consciousness. I am inclined to believe that the prominence of this experience in traditional accounts of mind is due to the fact that it is characteristically habitual with philosophers. What but bias could have led to the opinion that self-consciousness is typical of mind? Surely nothing could be farther from the truth. If self-consciousness means anything, it means mind functioning in an elaborately complicated way. Now one may *test* a definition by applying it to complex and derivative forms, but one learns to *isolate* and *identify* a genus from a study of its *simple* forms. It would be consistent with sound procedure, then, to expect to understand mind-knowing-itself, only after one has an elementary knowledge of the general nature of mind and the special function of knowing. Surely in this respect, at least, philosophy has traditionally lacked the sound instinct that has guided science.

But waiving methodological considerations, what is to be said of the cognitive value of my self-consciousness? Suppose me to be as habitually self-conscious as the most confirmed philosopher. Have I on that account an expert knowledge of self? There could not, it seems to me, be a clearer case of the mistaking of habit for insight. Upon examination my self-consciousness resolves itself mainly into familiar images, and familiar phrases containing my name or the first personal pronoun, such as 'I am,' 'I will,' 'I think,' 'I act.' But these phrases are perfectly typical of the fixed and stereotyped character that may be acquired by a confused experience, or, indeed, by an experience that is nothing more than the verbal formulation of a problem. And the more fixed and stereotyped such experiences, the more their confusion or emptiness is neglected. This is the true explanation, I think, of what is the normal state of mind in the matter of self-knowledge. Your average man knows himself, "of course," and grasps eagerly at words and phrases imputing to him an esoteric knowledge of soul; but he can render no intelligible account of it. That he has never attempted;

he is secure only when among those as easily satisfied as himself.

Who is so familiar with farming as the farmer? But he despises the innovations of the theorist, because routine has warped, limited, and at the same time intensified his opinions; with the consequence that while no one is more intimately familiar with farming than he, no one, perhaps, is more hopelessly blinded to its real principles. Now it is my lot to be a self-conscious mind. I have practised self-consciousness habitually, and it is certain that no one is so familiar with myself as I. But I have little to show for it all: the articulatory image of my name, the visual image of my social presence, and a few poor phrases. There *is* a complex state to which I can turn when I will, but it is a page more thumbed than read. And I am lucky if I have not long ago become glibly innocent of my ignorance and joined the ranks of those who deliver confusion with the unction of profundity, and the name of the problem with the pride of mastery. No — so far I cannot see that the royal road to a knowledge of self-activity has led beyond the slough of complacency. Either appeal is made to what everyone "of course" knows, to the mere dogma of familiarity, or stereotyped verbalisms and other confused experiences are solemnly cherished as though the warmth of the philosophical bosom could somehow invest them with life.

Mental Action as the Feeling of Bodily Action

§ 6. I am confident that the nature of mental action is discoverable neither by an analysis of mental contents nor by self-intuition; that it is necessary, in short, to abandon the method of self-knowledge altogether, and substitute that of general observation. But in the interests of thoroughness it is desirable to examine what at first glance appears to afford a reasonable compromise. I refer to the view that construes mental action as a *peculiar introspective complex*. This view is commonly held by those who reject the last. The intuition of a "Simon-pure activity," or an "activity *an sich*" is rejected on grounds of introspective analysis. But analysis at the same time reveals a characteristic activity *process*, composed of sensations of bodily exertion and strain, or of feelings of "the tendency, the obstacle, the will, the strain, the triumph, or the passive giving up." James has suggested that this process can be reduced to still smaller proportions. "Whenever my introspective glance succeeds in turning round quickly enough to catch one of these manifestations of spontaneity in the act, all it can ever feel distinctly is some bodily process, for the most part taking place within the head." "It would follow that our entire feeling of spiritual activity, or what commonly passes by that name, is really a feeling of bodily activities whose exact nature is by most men overlooked."[1]

There are several objections to this version of mental action. In the first place, it is evident that the *feeling* of action belongs to the content of the mind, and therefore cannot be that general action by virtue of which things become content. It is not the correlate of content in general, but only of certain other content such as percepts and ideas. There is need of a kind of mental action that shall account for the presence in mind of this very activity-complex itself.

Furthermore, there is an evident confusion in regarding the *feeling* of action as itself action. It is necessary, as the spiritists and transcendentalists have rightly maintained, to suppose some kind of action that shall bring contents together, and give them the peculiar *within-mind unity* which they possess. A consciousness of *a and b* is not a consciousness of *a* and a consciousness of *b*. And the feeling of action is no more capable of effecting this conjunction than is any other content. A consciousness of "intra-cephalic movements" *and* the movements of an external body, a unity of consciousness in which these are *present together*, cannot derive its unity from a consciousness of the one any more than from the consciousness of the other. Both movements must be subtended by some action that operates on them *jointly*. James is correct in supposing that the experience of bodily action is peculiarly significant. It constitutes a core or nucleus of content that is more constant than the rest. It constitutes a permanent background which persists while the more conspicuous objects in the foreground vary; and is thus an important factor in the sense of personal identity. But it is none the less *content*, and so prevented from serving as the agency which defines content as such, and gives it its characteristic unity.

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[1] James: *Pluralistic Universe*, pp. 376, 380; *Principles of Psychology*, Vol. I, pp. 300, 301–302; cf. below, pp. 354–356.

The true solution of the matter lies near at hand. If instead of defining mental action in terms of the *feeling* of bodily activities, he had defined it in terms of the bodily action itself, as he sometimes appears to do, these difficulties would have been obviated.[1] But this would have required the abandonment of the introspective method. For those bodily actions which now become most significant are only accidentally, if at all, felt by the conscious agent himself. A sound 'listened to' or 'heard,' is, by virtue of that action, mental content. Several sounds listened to or heard jointly compose a mental unity. But precisely what is the nature of listening or hearing? He who listens or hears is poorly qualified to say. The way it *feels* to listen or hear has little if anything to do with the matter. For listening and hearing are operations of the living organism, or specific operations of the nervous system, which lie in the field of general observation. And it is no more necessary to suppose that their nature is revealed to the agent which exercises them, than to suppose that the nature of breathing is revealed to him who breathes.

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[1] "So far as we are 'persons,' and contrasted and opposed to an 'environment,' movements in our body figure as our activities." (*Pluralistic Universe*, p. 379, note.)

III. THE METHOD OF GENERAL OBSERVATION

The Alleged Impossibility of Observing the Contents of Another Mind

§ 7. While proceeding to treat mind as though, like any other thing, it were open to general observation, I shall at the same time seek to reply to the objections which are ordinarily urged against such procedure. Most philosophers assume that it is essentially characteristic of a mind to be accessible only to itself. This proposition is rarely supported by evidence; it is commonly held to be sufficient to call attention to it. Thus it is asserted that "the essence of a person is not what he is for another, but what he is for himself. It is there that his *principium individuationis* is to be found—in what he is, when looked at from the inside."[1] As another writer expresses it, "That the mind of each human being forms a region inaccessible to all save its possessor, is one of the commonplaces of reflection."[2]

These are formulations of an almost universal presupposition. I believe this presupposition, as ill-defined and unreasonable as it is universal, to be the greatest present obstacle to the clear and conclusive definition of mind. There can be no doubt of the propriety of distinguishing 'internal' and 'external' views of the mind, and there can be no doubt of the practical or other circumstantial importance of emphasizing self-knowledge. But I do not believe that such distinction and emphasis lead properly to any generalization such as those which I have quoted; nor do I believe that they contribute fundamentally to the definition of mind.

The notion of the privacy of mental contents rests mainly upon the fallacy of 'exclusive particularity.' It is characteristic of content of mind, such as perceptions and ideas, to belong to individual minds. My idea is mine; and in some sense, then, falls within my mind. From this it is hastily concluded that it is therefore exclusively mine. Now it is clear that my idea cannot be alienated from my mind, without contradiction. It must not be attributed to the *not-my-mind* which is the other term of a disjunctive dichotomy. *But it does not follow that my idea may not also be your idea.* There are many such cases. Friends are essentially such as to belong to friends, and my friend is veritably mine; but he may, without contradiction, become yours also. Similarly, my home, my parents, my country, although in order to be what they are they must be possessed by such as me, may without logical difficulty be shared with you.

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[1] H. Rashdall, in *Personal Idealism*, edited by H. Sturt, p. 383.

[2] M. F. Washburn, *The Animal Mind*, p. 1.

But I may seem to have overlooked a vital point. Although one thing can be the object both of my idea and of yours, can *my idea itself* be also yours? Does not the whole being of *my* idea lie in its relation to me? Doubtless Neptune may become my idea, and also yours; but can my idea of Neptune ever become an idea of yours? Now this clearly depends upon whether the determination of Neptune which makes it my idea can itself submit to another determination of the same type. There is no *a priori* objection that would not beg the very question under discussion. Here again cases from other classes of objects are very common. The sum of three and three may itself be added to three; you may paint me in the act of painting my model; the general may fear the fear of his army. And, similarly, a thing's relation to me as my idea, may enter into another such relation to you and become your idea. It will doubtless remain true that my idea simply, and your idea of my idea, will differ through the accession of the last cognitive relationship; and that in this sense my idea cannot be completely identical with your idea. But it is impossible even to state this trivial proposition without granting that you may know my idea, which is the point at issue.

The mere fact, then, that ideas are always included within some mind, and thereby excluded from what is altogether not that mind, contributes no evidence for the absolute privacy of mind. Any group whatsoever is private, in the sense that what is in it cannot by definition be outside of it, nor what is outside of it in it. But this does not prevent what is inside of it from being *also* inside of something else, nor does it prevent the entire group from being inside of another like group. Everything depends on the particular nature of the groups in question. And we have already found it necessary to classify minds among intersecting rather than exclusive systems. Indeed, such a classification would seem to be necessarily implied in the general conception of social intercourse. How, then, are we to explain the widespread disposition to regard minds as exclusive?

In the first place, we readily extend to our minds the group relation which holds in the case of our bodies. There is a special sense in which things are inside and outside of the mind, but it tends naturally to be confused with the sense in which things are inside and outside of the body. The tendency is partly a misuse of schematic imagery, and partly a practical bias for the bodily aspect of the mind. Suffice it here to remark that the mutual exclusiveness of our bodies is so highly emphasized, that even the vaguest supposition that our minds are within our skins, is sufficient to give rise to a notion that they too are wholly outside one another. Such a supposition is generally admitted to be false, but it nevertheless lingers on the scene; and not only falsifies the grouping of mind, but exaggerates the difficulty of knowing mind from the standpoint of general observation.

In the second place, various motives, methodological, religious, and social, have so emphasized the difference between mind and mind, or between the individual mind and the outer world, that this difference tends to be transformed into a relation of exclusiveness. Psychological introspection, when superficially interpreted, defines a region set apart from nature and society. Religious introspection heightens the difference between the inner life and the life of the world. The problems of personal morality under complex social conditions tend to heighten the difference between individual lives. Such a proposition as "No one else can understand me" has only to become familiar and practically intensified, to be converted readily into an absolute principle. Thus the *difficulty* of knowing certain aspects of another mind tends to be mistaken for *the impossibility* of the entrance of mind into mind. Proverbial difficulties easily become logical impossibilities. To avoid gross confusion it is necessary to examine the difficulties concretely and circumstantially; to point out the conditions under which they arise, and the elements of mind which they tend to obscure.

The Difficulty of Observing Mental Content. The Case of Perception

§ 8. Beyond question the content of an individual mind at any given time may be successfully hidden from general observation. But this in itself does not imply any general proposition to the effect that a mind is *essentially* such as to be *absolutely* cut off from such observation. It may be that your inability to discover what I am imagining, thinking about, or remembering, is only like the assessor's inability to discover the amount of my property; and no one has asserted that property is essentially knowable only to its owner. Let us examine the circumstances.

In the first place, it is evident that under favorable circumstances you have no difficulty in following my mind. Where, for example, we are engaged in such intercourse as involves a bodily dealing with physical objects, it is as easy as it is indispensable for each to know what is in the mind of the other. The objects themselves here provide mutually accessible content in a manner that is unmistakable. A clear case in point is the exchange of currency for merchandise; but to illustrate the experience exhaustively would be to traverse nine-tenths of life. Such mutual apprehension of the physical things which you and I have in mind is the condition of all intercourse between us; we could not shake hands without it.

There is another way in which you readily follow my mind, namely, through my verbal report. We do not often sit down and deliberately disclose our minds to one another; more commonly we use language to the end that we may together think the same things. But if you are a psychologist, or an interpreter of dreams, I may "tell" you what is in my mind. Now it is frequently assumed by the sophisticated that when I thus verbally reveal my mind you do not *directly* know it. You are supposed directly to know only my words. But I cannot understand such a supposition, unless it means simply that you know my mind only *after* and *through* hearing my words. If it is necessary for you to take a book from the shelf and turn over its pages before you can discover the date of Kant's birth, or walk across the street before you can discover the number of your neighbor's house, do you therefore not know these things directly when you do know them? And if you must wait until I tell you before you know what image is in my mind, do you therefore not know the image directly when you do know it? If not, then what *do* you know directly when the matter is concluded? Surely not the word; for this having served its turn, receives no further notice. It is not the word which is communicated, except in the wholly exceptional cases in which the word is not understood and so does not fulfil its function. And it is certainly implied in all of our subsequent action and intercourse relating to the image, that we have access to it jointly, just as we do to our money and our lands; that you know it now even as I know it.

It is important to labor under no misapprehension concerning the general function of language. Language does not arise as the external manifestation of an internal idea, but as the means of fixing and identifying abstract aspects of experience. If I wish to direct your attention to the ring on my finger, it is sufficient for me to point to it or hand it to you. In seeing me thus deal with the ring, you know that it engages my attention, and there occurs a moment of communication in which our minds unite on the object. The ring figures in your mind even as it does in mine; indeed the fact that the ring does so figure in my mind will probably occur to you when it does not to me. If, however, I wish to call your attention to the yellowness of the ring, it will not do simply to handle it. The whole object will not suffice as a means of identifying its element. Hence the need of a system of symbols complex enough to keep pace with the subtlety of discrimination. Now the important thing to bear in mind is the fact that as a certain practical dealing with bodies constitutes gross communication, so language constitutes refined communication. There is no difference of objectivity or subjectivity. In the one case as in the other, mind is open to mind, making possible a coalescence of content and the convergence of action on a common object.

For purposes of further illustration, consider the case of disguised perception. I am watching you "out of the corner of my eye," hoping to deceive you as to my real thoughts. If the strategy is successful it proves that I can render equivocal the evidence you commonly rely on. But does any one seriously suppose that the direction of my thoughts is not discoverably there in the retinal and nervous process responding to your body, and in my intention to deceive? Where my mind is the object to be known, I can embarrass the observer because I can control the object. I can even make and unmake my mind. As you seek to follow my thoughts, I may accelerate them or double on my tracks to throw you off the scent. But I enjoy the same advantage over you if you are an assessor seeking to know my property, and neither in the one case nor in the other is it proved that the facts are not there for you to know as well as I. Indeed the special qualifying conditions to which we are compelled to refer when describing the hidden mind, leave no doubt that the difficulties in this case are essentially like the difficulties which check or thwart any cognitive enterprise. Some things are more difficult to observe than others, and all things are difficult to observe under certain circumstances. This is true of mind in no mysterious or unique way.

Proprio-ceptive Sensations

§ 9. Sensations of the internal states of the organism itself present a peculiar case, that is of sufficient importance to receive independent treatment. Concerning certain happenings within my body, I am, so to speak, the only eye-witness. This circumstance plays a very important part in the unique self-knowledge imputed to the mind, and in particular, I believe, lends specious significance to the self-conscious and introspective experiences which have just been examined. Let us first set down the general facts in the case.

A leading physiologist writes as follows: "Bedded in the surface layer of the organism are numbers of receptor cells constituted in adaptation to the stimuli delivered by environmental agencies. [These receptors the author calls "*extero*-ceptors."] But the organism itself, like the world surrounding it, is a field of ceaseless change, where internal energy is continually being liberated, whence chemical, thermal, mechanical, and electrical effects appear. It is a microcosm in which forces which can act as stimuli are at work as in the macrocosm around. The deep tissues . . . have receptors specific to themselves. The receptors which lie in the depth of the organism are adapted for excitation consonantly with changes going on in the organism itself, particularly in its muscles and their accessory organs (tendons, joints, blood-vessels, etc.). Since in this field the stimuli to the receptors are given by the organism itself, their field may be called the *proprio-ceptive* field." [1]

Now my body lies beyond the periphery of every other body, and can, therefore, be generally observed only by "extero-ceptive" organs, such as those of vision, touch, etc.

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[1] C. S. Sherrington: *The Integrative Action of the Nervous System*, pp. 129–130.

But while I may also observe myself in this fashion, my "proprio-ceptors" enable me alone to know my body in another way. There is no occult reason for this; it is a matter of physiological organization. I am sensible of interior pressure and strain, or of the motion and muscular control of my limbs, in a manner impossible for any other observer, simply because no other observer is nervously connected with them as I am. I alone can be specifically sensible of loss of equilibrium, because my semicircular canals, though visible and tangible to others, have a continuous nervous connection with my brain alone. More important is the fact that I am sensible in a very complex way of states and changes in my visceral, circulatory, and respiratory systems. Here, again, I am possessed of sensations from which other observers are cut off for lack of certain nerve fibres which connect these organs only with *my* cerebral centres.

Now what is the inference from these facts? In the first place, it is to be observed that these sensations constitute knowledge of the body, and not of mind in the traditional sense. I have a species of cognitive access to the interior of my body from which all other knowers are excluded. My heart palpitates for me as it palpitates for no one else. But as it has never been argued that a physical organism is a thing known only to the mind inhabiting it, let us present the matter in another way. My mind possesses sense-contents that can not be similarly presented in any other mind. I alone can "have" these sensations. But does it follow that you cannot know them? Firstly, there is nothing *in* the sensation that you cannot know. The peculiar quality of heart-palpitation is known to you in other instances; and the bodily locality which makes it mine is immediately perceived by you. These factors must, it is true, be put together by you, but the result is nevertheless knowledge. And secondly, there is nothing *about* the sensation that you cannot know even better than I. If I were to follow up the mere presentation of the sensation, and proceed to an adequate knowledge of it, I would necessarily rely on anatomical and physiological methods that have from the first been open to you. Indeed, here I am seriously embarrassed; for as you are cut off from proprio-ceptive sensations of my bodily interior, so I am largely cut off from the extero-ceptive sensations which are much more indispensable to a knowledge of sense-structure and function. In short, certain things are presented in a characteristic way to me alone. I alone can have proprio-ceptive sensations of my own body. In order that you may know the interior of my body it is necessary for you to use your imagination, or some other relatively elaborate process.

Is this what is meant by saying that mind can be known only by itself? If so, then that contention loses all of its momentousness. For this is only a case of a very large class. It may even be contended that all existent things are such as to be presented instantly and simply only to a privileged group of knowers. In so far as spacial, events can be sensibly known only by those who enjoy a certain definable proximity, and in so far as temporal only by contemporaries. But this does not withdraw them from the general field of knowledge. I must use my imagination to know what the East Indian may know by opening his eyes; but my knowledge may none the less exceed his. And furthermore, even if it were granted that proprioceptive sensations can be known only introspectively, I can scarcely believe that those who emphasize the uniquely internal character of mind mean that the mind consists in a confused and partial knowledge of the interior of the physical body!

A word more is necessary to show the full importance of the matter. The experiences on which I most rely for a knowledge of myself as mental agent or subject contain an admixture of proprio-ceptive sensations. The very act of self-consciousness is itself attended by characteristic sensations due to bodily posture and respiratory changes. But above all, the experience of self-activity or effort is largely made up of sensations of internal motion and strain. These experiences are stereotyped, obscure, and largely accidental. But there is, nevertheless, a propriety not commonly recognized, in regarding the proprio-ceptive experience so far as it goes as really a knowledge of self. For my proprio-ceptive experience is largely a knowledge of *my organic action on the environment*, and it is this action when construed in a certain manner that really constitutes mental action.[1]

The Content of Desire, Memory and Thought

§ 10. As respects the accessibility of my mental contents to your observation, the most important general fact is this: that your observation will be baffled *just in so far as my dealings with the content of my mind are not peripheral.* Contrary to a common philosophical opinion, my purpose, intention, or desire is least likely to escape you. This element of my mind is revealed even in my gross action, in the motions of my body as a whole. Your apprehension of it is as sure and as indispensable to social relations as your apprehension of the physical objects that engage my attention. The content of my purpose, that is, the realization proposed, and my more or less consistent devotion to it, are in your full view, whether you be a historian of character or a familiar companion. It is not, then, the desiderative element in mind that escapes observation, nor is it any such typical element, but all content in so far as the mind's dealings with it do not reach the visible exterior of the body. But what is implied in this very statement?

In the first place, we imply that the content in question is such as to be knowable by me if I can identify it. Commonly, doubt exists only as to which of several things, all plainly known to you, is at the moment known to me. I may tell you, and when I do, one is selected and the others fall away. Or you may conjecture, and if your conjecture be true you possess the content, though without being sure of the relation to my mind.

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[1] Cf. Sherrington, *op. cit.:* "The other character of the stimulations in this field (the *proprio-ceptive*) we held to be that the stimuli are given in much greater measure than in the surface field of reception, by actions of the organism itself, especially by mass movement of its parts. . . . The immediate stimulus for the reflex started at the deep receptor is thus supplied by some part of the organism itself as agent" (p. 336). Cf. below, pp. 298–301.

But in the second place (and I here anticipate a charge of grave omission) the relation of the content to my mind must be supposed to be *objectively and discoverably there*, even when I do not acknowledge it by a verbal report. It is impossible to formulate a case of memory, for example, without affirming a connection between the past event which contributes the content and the locally present mind that is recalling it. If I am in fact here and now recollecting a visit to London in 1905, a complex is defined, the essential terms of which are in your plain view. And the connection must be homogeneous with the terms. The past event as it was, must be engaged or dealt with by me as I stand before you. In other words, the original perceptual response must be *continued into the present.* But this is possible only through the identity of the nervous system. The link of recollection, connecting past and present, lies in a retrospective functioning of my body, which can be accounted for only by its *history*. And this is as accessible as any natural or moral process. When you know that I am looking at the moon, the salient facts are before you, the focalized posture of my body and its organ of vision, the concentration and consistency of my action, and, most important of all, the moon. In the case of my recollection of London the facts are more complicated, and even in part inaccessible, but equally with the facts just cited, they are in the context of your possible knowledge. They consist in such elements as my central attentive process, certain persisting modifications of my cerebrum, my original dealings, practical and neural, with London, and — London itself.

The same general consideration will apply also to thought. When I am thinking abstractions, the contents of my mind, namely the abstractions themselves, are such as you also may think. They are not possessed by me in any exclusive sense. And the fact that they are my contents means that they are somehow bound up with the history of my nervous system. The contents, and the linkage which makes them mine, are alike common objects, lying in the field of general observation and study.

The Alleged Impossibility of Observing Mental Action

§ 11. When mental content is thus arrived at by general observation rather than by introspection, the action which is correlative to it, which invests it with a new status and brings it together in a new way, is revealed at the same time. You observe the contents of my mind by following my glance or my words; so that at the same time that you observe the contents, you may also observe the action, namely my *visual or verbal response* to these contents. But we must deal here with the traditional objection that it is paradoxical or contradictory to suppose that mental action can be observed, as other things are observed. Mental action, it is argued, is active; and to be observed it would have to become passive, and so lose its distinctive nature. Or, mental action is subject, and so can never be object without forfeiting its identity.

The objection rests obviously upon the error of 'exclusive particularity.' It presupposes that what is active cannot also be passive, or that what is subject cannot also be object. Knowledge, it is asserted, always assumes the form (S) R (O) (subject-knowing-object). And in this abstract scheme, S cannot change its place without forfeiting its nature, since, like the hypothenuse of a right-angle triangle, its nature *is* its place. But it does not follow that *the same concrete entity* may not change its place, and having once been S now become O; as the same straight line, having been the hypothenuse of one triangle may become the side of another. The same soul or nervous system, or whatever was filling the office of subject, might come to fill also the office of object. Or, while a given entity was filling the office of subject in relation to an object, it might at the same time be itself filling the office of object in relation to a second subject. And the nature of the office of subject, as exemplified in the first subject, could thus be known in the ordinary way by the second subject. Thus there is nothing whatsoever to stand in the way of the supposition that the bodily action wherewith I deal with things and make them my objects, may itself be similarly dealt with and made object by another bodily agent; or in supposing that the bodily process which in my own experience functions as mental action, and does not appear as content, should be the content of another mind. And on this supposition, it would naturally be agreed that the person best qualified to report on the nature of my mental action would be not myself, the user of it, but the physiologist or moralist who is the beholder of it.

Mental Action as Nervous System

§ 12. We are now prepared for a statement of the nature of mental action in terms of general observation. And in the first place, it is to be observed that mental action is a property of the physical organism. This view is contained in principle in Mach's notion that an element is mental in so far as it stands in a relation of functional dependence to a certain specific set of elements, which he calls the elements *K L M* . . . ; these elements corresponding to what is generally known as the nervous system.[1] To this notion of Mach's must be added the so-called "motor theory" of consciousness, which is steadily winning a general acceptance among psychologists. "We are compelled to believe," says Professor McDougall, "that the nervous processes of the brain are of the type of the reflex processes of the spinal cord, and consist in the transmission of physical impulses through channels of great complexity from the sensory to, or towards, the motor nerves, and to believe that *all psychical* processes are accompanied by nervous processes of this character."[1] We are thus led to the view that elements become mental content *when reacted to in the specific manner characteristic of the central nervous system.*[2]

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[1] Cf. above, pp. 78–79.

This conclusion is approximated by at least two recent writers of wide influence. Richard Avenarius, the founder of the so-called "Immanence School" in Germany, employs a peculiar terminology of his own.[3] The central nervous system he terms "system *C*." This system he conceives, after the naturalistic fashion, as situated in an environment from which it receives stimulations ("*R*-values"), and to which it gives back a characteristic response ("*E*-values"). Experience or mental content consists of these *E*-values, or responses of system *C*. Avenarius, however, leaves us in doubt whether the reaction of system *C* does not *create* contents. It would appear that the "*E*-values" are more than actions; that they embrace mental constructs not given in the environment.

The correct view is more closely approached in Bergson's theory of pure perception. This writer concludes that "the living body in general, and the nervous system in particular, are only channels for the transmission of movements, which, received in the form of stimulation, are transmitted in the form of action, reflex or voluntary. That is to say, it is vain to attribute to the cerebral substance the property of *engendering representations.*" Its function is selective; and those parts of the environment which it selects by its action, whether virtual, nascent, or actual, *are* the content of perception. "If we suppose an extended *continuum*, and, in this *continuum*, the center of real action which is represented by our body, its activity will appear to illumine all those parts of matter with which at each successive moment it can deal." In other words, mental content consists of portions of the surrounding environment "illumined" by the action of the organism.[1]

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[1] W. McDougall, *Physiological Psychology*, p. 7 (italics mine). Cf. also H. Münsterberg: *Grundzüge der Psychologie*, pp. 525–562.

[2] See note on p. 305.

[3] Cf. W. T. Bush: *Avenarius and the Standpoint of Pure Experience*, pp. 39 sq.; Avenarius: *Der Menschliche Weltbegriff*, *passim*. The present leader of the "Immanence School" is Joseph Petzoldt; cf. his *Einführung in die Philosophie der reinen Erfahrung*.

Mental Action as Interest

§ 13. Bergson's view does not suffice as a thoroughgoing theory of mind, because it is limited to perception. A creative function is reserved for mind in its other operations.[2] But he states with admirable clearness a principle which can readily be extended to the higher functions of mind. And furthermore his statement of the principle possesses the additional advantage of emphasizing the essentially teleological character of mental action. "Conscious perception," he says, "does not compass the whole of matter, since it consists, in as far as it is conscious, in the separation, or 'discernment,' of that which, in matter, *interests our various needs*."[3] The action of the nervous system is a function of the organism, and like the organism it exhibits *the control of interest*. So that a physiological account of the action of mind must be supplemented by a moral account. And content of mind must be defined *as that portion of the surrounding environment which is taken account of by the organism in serving its interests;* the nervous system, physiologically regarded, being the mechanism which is employed.

As mind appears in nature and society, it consists primarily in interested behavior. Such behavior is promptly and almost unerringly distinguished by all save the most rudimentary intelligences. Indeed, the capacity of making such a distinction is one of the conditions of survival. Upon the lowest plane of social intercourse a mind is a potentiality of bodily contact, and is marked and dealt with accordingly. But even upon a comparatively low plane there is recognition of a characteristic difference between minds and other bodily things. Minds exhibit spontaneity and waywardness, a certain isolation of control *in their own interest.* Individually they manifest persistent hostility, which is feared in them, or persistent friendliness, which is courted in them. Such a recognition of mind is already present in a mind's discriminating reaction to anger, or to a hereditary foe, as denoting a marked or constant source of danger.

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[1] Bergson: *Matter and Memory*, trans. by Paul and Palmer, pp. 81, 309 (first italics mine). Cf. Ch. I, *passim*.

[2] Cf. *op. cit.*, Ch. II, III; and above, pp. 239–240, 261–265.

[3] *Op. cit.*, p. 78 (italics mine). A similar idea is contained in Avenarius's conception of the "*E*-values" as determined by the endeavor of "system *C*" to maintain its equilibrium. Cf. Bush, *op. cit.*, pp. 40–41.

Where social relations are more subtle and indirect, the element of interest tends to supplant the merely physical and mechanical element of mind altogether. In my dealings with my neighbor I am most concerned with his desires or his consistent plan of action. I can injure him by checkmating his interests, or profit by him through combining my interests with his. It is most important for me to know what he consistently seeks. He is a living policy or purpose of which I must obtain the key-motive if I would make either peace or war.

I am also familiar with my own propensities. In so far as I am reflective, my impulses and ideals are repeatedly the objects of my contemplation and scrutiny. They are defined, adopted, rejected, or reaffirmed in every moral crisis. But if be true that my interests are myself, in the deepest sense, it is no less true that they are evident to any intelligent observer. They are the defining forms of my life. In so far as they move me they cannot be hidden away within me. They mark me among my fellows, and give me my place, humble or obscure, in the open field of history. It is possible, doubtless, to emphasize the introspective factor of desire. But desire in so far as content, merely, is not desire at all. Desire as moral, as a form of determination, belongs not to the domestic mind, but to mind at large in nature and society.

§ 14. And precisely as a mind's interests are evident to general observation, so are the objects on which it acts interestedly. If I am to deal with my friend or enemy at close range, it is clear that I must think with him, or always to some extent traverse with him the objects in his field of view. Upon higher planes of intercourse, in narrative, in straightforward and companionable discussion, another's mind consists more of objects than anything else. Its bodily aspect falls away, and even its impelling interest tends to be neglected. But it needs only a shifting of the attention to correct the perspective. I may deliberately take pains to discover and supply a mind's objects. To do so I have only to observe what the mind selects from its environment.

Mental Content as Identified by Interested Action

Is this not what is done, for example, by the student of the animal mind? We are told that the amœba has four general reactions of the organic type. One of these is described as *positive*: "a pseudo-podium is pushed forward in the direction of the stimulus, and the animal moves towards the solid." The solidity of bodies enters into this animal's practical economy: "the positive reaction is useful in securing contact with a support on which to creep."[1] Here is an element of the environment that is marked and isolated by a response which expresses the organism's self-preservative impulse. Do we, then, not know the content of the amœba's mind? Should I ever understand the matter better by contracting my own mind to amœba-like proportions? I grant that as I have loosely described the matter, much doubt exists as to how far the amœba's discrimination goes, but in his studies of sensory discrimination the comparative psychologist has already devised methods which open the way to greater exactness.[2] Conditions may be contrived which make it to the animal's interest to notice differences, and these may be progressively refined until the animal is pressed to the limit of his sensibility. When after such tests the conclusion is reached that the animal *feels the solid or sees blue*, what remains to be said by way of "interpretation?"[1] The amœba does not, it is true, feel the solid as we do. Therefore let us *observe the amœba*, and not undertake to say how we should feel if we were amœbæ. We shall then find that which is presented to the amœba to be distinguished from the fuller environment that lies before us, by the *amœba's interested action.*

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[1] Washburn, *op. cit.*, p. 40.

[2] Cf. *ibid.*, Ch. IV.

There will still persist, I feel sure, a belief to the effect that mental content can never be known in this way. Such belief appears to me to be due, at least in part, to a curiously perverse habit of thought. It is customary to look for the content *within the body*, and then solemnly declare that it is not to be found. Though long since theoretically discredited, the 'subcutaneous' mind still haunts the imagination of every one who deals with this problem. But why not look for the object where it belongs, and where it is easily accessible — namely, in the environment? Is it not in truth the environment which the amœba or any other organism *is sensing*? If, then, we are in search of content, why take so much pains to turn our backs on it, and look for it where by definition it must escape use. Such procedure is due, I think, simply to a failure to group together *behavior, and those elements of the environment selected by the behavior* — the reaction, *and* the stimulus. It is true that neither behavior, nor even conduct, is mind; but only because mind is behavior, or conduct, *together with* the objects which these employ and isolate.

§ 15. In conclusion let me briefly summarize the parts of mind which the analysis has revealed.

(1) In the first place, a mind is a complex so organized

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[1] I have reference here to such statements of method as the following: "Knowledge regarding the animal mind, like knowledge of human minds other than our own, must come by way of *inference from behavior.* Two fundamental questions then confront the comparative psychologist. First, by what method shall he find out how an animal behaves? Second, how shall he *interpret* the conscious aspect of that behavior?" (The italics are mine.) *Ibid.*, p. 4.

as to act desideratively or interestedly. I mean here to indicate that character which distinguishes the living organism, having originally the instinct of self-preservation, and acquiring in the course of its development a variety of special interests. I use the term *interest* primarily in its biological rather than in its psychological sense. Certain natural processes act consistently in such wise as to isolate, protect, and renew themselves. (2) But such processes, interested in their general form, possess characteristic instrumentalities, notably a bodily nervous system which localizes the interest and conditions the refinement and range of its intercourse with its environment. (3) Finally, a mind embraces certain contents or parts of the environment, with which it deals through its instrumentalities and in behalf of its interests.

A Summary Definition of Mind

The natural mind, as here and now existing, is thus an organization possessing as distinguishable, but complementary, aspects, *interest, nervous system, and contents*. Or, if interest and nervous system be taken together as constituting the action of mind, we may summarize mind as *action* and *contents*.

The evolution of mind appears on the one hand in the multiplication and coördination of the interests which govern it, and on the other hand in its enrichment of content through gain in discrimination and range. The latter, in turn, means the increase of that proportion of the environment of which its improved capacities enable it to take account. The human mind is preëminent in respect both of discrimination and range. In other words, it acts on abstractions and principles, on an innumerable variety of complex objects, and on remote regions of space and time; all of which lie outside the practical economy of animals comparatively deficient in sense, memory, imagination, and thought.

It is only just to admit that mind as observed introspectively differs characteristically from mind as observed in nature and society. But this does not prove that in either case it is not directly known, or that what is known is not the real mind. Every complex object presents its parts in a different order when approached in different ways, but in the object as wholly known these parts fit and supplement one another. As introspection obscures the instrumental and action factors of mind, so general observation obscures its content factor. But when these factors are united, they compose a whole mind, having a structure and a function that may be known by any knower, whatever his initial bias.

[NOTE (see p. 299). — Since this book was written Professor E. B. Holt's views to which the author had already been indebted, have been published. Holt's *Concept of Consciousness*, and "Response and Cognition" in *Jour. of Phil., Psych., and Scientific Methods*, Vol. XII, Nos. 14 and 15, now constitute the most able statement of the above theory with special emphasis on its physiological aspects.]

CHAPTER XIII

A REALISTIC THEORY OF KNOWLEDGE

I. THE THEORY OF IMMANENCE

The Old Realism and the New

§ 1. THE new realism is a revival of what has been referred to as the "antiquated metaphysics, which talks about existence *per se*, out of all relation to minds." [1] But lest it be thought that this theory is altogether antiquated, it is important to point out its precise relation to earlier forms of realism. The most remarkable parallel which the past affords is to be found in a theory which Hume entertained provisionally as a natural sequel to his analysis of mind. This parallel is so instructive as to warrant its being quoted in full.

"We may observe," writes Hume, "that what we call a *mind*, is nothing but a heap or collection of different perceptions, united together by certain relations, and suppos'd, tho' falsely, to be endow'd with a perfect simplicity and identity. Now as every perception is distinguishable from another, and may be consider'd as separately existent; it evidently follows, that there is no absurdity in separating any particular perception from the mind; that is, in breaking off all its relations, with that connected mass of perceptions, which constitute a thinking being. . . . If the name of *perception* renders not this separation from a mind absurd and contradictory, the name of *object*, standing for the very same thing, can never render their conjunction impossible. External objects are seen, and felt, and become present to the mind; that is, they acquire such a relation to a connected heap of perceptions, as to influence them very considerably in augmenting their number by present reflections and passions, and in storing the memory with ideas. The same continu'd and uninterrupted Being may, therefore, be sometimes present to the mind, and sometimes absent from it, without any real or essential change in the Being itself." [1]

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[1] G. H. Howison: *The Limits of Evolution, and Other Essays*, p. 21.

It will be noted that Hume here regards things not only as possessing being independently of the mind, but also as *identical with perceptions when present to the mind.* Indeed, he was first convinced of their identity with perceptions, and suggested their independence only as an afterthought. In this respect Hume's view is to be distinguished from the "natural realism" of the Scottish School of Reid and Hamilton. These writers were concerned primarily to avert the sceptical and absurd consequences of the "ideal philosophy," which merged external reality into the mind's ideas. They sought to restore the traditional substances, the mind within and the nature without; and regarded both as distinct from the ideas that "suggest" them. In the case of the "primary" physical qualities, "extension, solidity, and motion," they did, it is true, assert a doctrine of "real presentationism." But they did not explain how bodies can be "suggested," "presented," or "conceived," without becoming ideas; or how without the mediating function of ideas, minds can know bodies. In other words, the dualistic difficulty was aggravated and not relieved.[2]

Modern realism is closer to the monistic realism of "ideas," suggested by Hume, than to the dualistic realism of mind and matter, propounded by the Scottish School; and this in spite of the fact that the Scottish philosophy was primarily a polemic, in the name of "realism," against

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[1] Hume: *Treatise of Human Nature* (Selby-Bigge's edition), p. 207. Cf. above, pp. 137–138. Professor W. P. Montague called attention to this aspect of Hume in an article entitled "A Neglected Point in Hume's Philosophy," *Phil. Review*, Vol. XIV, 1905.

[2] Thomas Reid: *Inquiry into the Human Mind* (1764), ch. I, V, VII; Sir William Hamilton: *Notes B, C, D*, appended to his edition of the *Philosophical Works of Thomas Reid;* especially, eighth edition, p. 825. Cf. J. S. Mill: *Sir William Hamilton's Philosophy*, Ch. II.

Hume, as the last and most outrageous of the idealists. The new realism, while it insists, as all realism must, that things are *independent*, asserts that when things are known, they *are* ideas of the mind. They may enter *directly into* the mind; and when they do, they become what are called 'ideas.' So that ideas are only things in a certain relation; or, things, in respect of being known, are ideas.

It is important, therefore, in expounding the general realistic theory of knowledge, to distinguish two component theories. The first I shall call the theory of 'immanence.' This is the same theory as that which I have in another connection termed 'epistemological monism.'[1] It means that when a given thing, *a*, is known, *a itself* enters into a relation which constitutes it the idea or content of a mind. The second I shall call the theory of 'independence;' and it means that although *a may* thus enter into mind, and assume the status of content, it is not dependent on this status for its being, or nature. After discussing these two theories, which deal with the problem of the relation of knowledge to its objects, I shall apply them briefly to the problem of truth.

The Duality of Mind and Body as a Difference of Organization

§ 2. There are two varieties of dualism which the theory of immanence makes it possible to escape; the dualism between mind and body, and the dualism between thought and things. The theory of immanence escapes these dualisms by employing the notion of *relation* in place of the notion of *substance*.[2]

The dualism between mind and body received its classic formulation, as we have seen, in the philosophy of Descartes. This was essentially a 'substance-attribute' philosophy. Mind and body were conceived as two self-contained and mutually exclusive spheres, characterized and distinguished by the two attributes, 'thought' and 'extension.' These two attributes Descartes regarded as *ultimately* different, and as involving a complete disjunction between the substances which they qualified. The Cartesian dualism gave rise to the most baffling perplexities. If mind and body be disjoined by definition, how explain the empirical fact of their union? For those facts which are so prominently in evidence in philosophy, namely, the processes of perception and of voluntary action, are neither exclusively mental nor exclusively bodily, but a blend of the two. In perception a process which begins as bodily ends as mental; and in volition a process which begins as mental ends as bodily. Notwithstanding these difficulties the Cartesian dualism has been perpetually confirmed by the habits of common sense; and still remains the most plausible, and superficially the most intelligible, doctrine. For it is customary and instinctive to think of all duality as exclusive, like the duality of bodies or non-intersecting spaces. Gesture and symbol — in short, every method of sensuous representation, exhibit the same type of duality; so that it requires more than the ordinary precision of thought to avoid the assumption of its universality.

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[1] Cf. above, pp. 124–126.

[2] It has been suggested that the categories of *substance*, *quality*, and *relation* represent natural stages in the evolution and refinement of thought. Cf. Ludwig Stein: "Der Neo-Idealismus unserer Tage," in his *Archiv für systematishe Philosophie*, Vol. IX, 1903; referred to by W. P. Montague: "The Relational Theory of Consciousness and its Realistic Implications," *Jour. of Phil., Psych., and Scientific Methods*, Vol. II, 1905.

Human experience abounds, however, in dualities of another type. Social aggregates, for example, are distinguished not by the inherent nature of their contents, but by some unifying relation. Thus the residents of the United States are divided into sexes, political parties, races, ages, and innumerably many other groups; and these groups *overlap and intersect.* They do not possess their members exclusively, but share their members. The difference between any two groups, such, for example, as the Democratic party and the proletariat, is not a difference of members — for it is conceivable that their membership should exactly coincide; but a difference of *principle of organization.* In respect of one relation the members constitute one group, and in respect of another relation the same members constitute another group.

The theory of immanence applies this type of difference to the duality of mind and body. The application becomes possible, indeed necessary, the moment it is recognized that mind and body are both complexes capable of being analyzed into more primitive terms. Neither mind nor body is really simple; although common sense and philosophical tradition have conspired to make them appear so.[1] And when they are submitted to analysis, it appears that the more primitive terms of which they are composed are, in many cases at least, interchangeable. There are sensible qualities and logical categories common to both. Indeed it is impossible to find ground for asserting that there is *any* term of the bodily complex that is disqualified from entering the mental complex.

This view is best set forth in Ernst Mach's little book, *Die Analyse der Empfindungen*, which deserves to be numbered among the classics of modern realism.[2] The *elements* of the physical and the psychical, according to this author, are the same. But while physics studies one type of relationship, such as the relation of a color to the source of light, psychology studies its peculiar relation to the retina or nervous system of a sentient organism. The color itself is *neither physical nor psychical.*[3]

While Mach's statement of the theory is correct in principle, it is colored by the author's naturalistic predilections. He neglects the logical aspect of knowledge. Physical and psychical complexes have in common not only sensible qualities, but also certain more fundamental formal relationships, such as implication, order, causation, time, and the like. These relations in their purity can be discovered only by carrying analysis beyond the bounds of sensible discrimination. They require, in short, *logical* analysis.[1] Those who have adequately recognized the importance of logic have, on their side, usually neglected the specific question of the relation of mind and body. The full scope of the theory of immanence appears only when it is recognized that the same elements compose both mind and body; and that these common elements embrace both sense *qualia* and also logical abstractions. Then, instead of conceiving of reality as divided absolutely between two impenetrable spheres, we may conceive it as a field of interpenetrating relationships, among which those described by physics and psychology are the most familiar and typical, and those described by logic the most simple and universal.

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[1] Cf. above, pp. 51–53, 279–283.

[2] There is an English translation by C. M. Williams, already referred to above, pp. 78–79. Cf. also Mach: *Erkenntnis und Irrtum.*

[3] Cf. above. pp. 277–279; and below, pp. 364–365.

When mind and body are so conceived, there is no longer any peculiar difficulty involved in the perception of bodily objects.[2] For the relationship which invests a term with a bodily character does not preëmpt it; so that at the same time that it is bodily by virtue of one relation, it may also be content of perception by virtue of another relation. When I perceive Mars, the sun's satellite (body) is my percept (mind); and there is no more contradiction than in supposing that my uncle is my father's brother.

Representation as an Immanent Relation

§ 3. The second dualism which the theory of immanence makes it possible to escape is that between knowledge and things. This dualism is not based merely on a disjunction of substances defined by dissimilar attributes, but on the alleged 'self-transcendence' of knowledge. It would appear that knowledge is 'about' things other than itself. This has given rise to the notion of the 'thing in itself,' as that to which knowledge points or refers, but which is always 'other' than the content of knowledge. The difficulty is evident. All qualities and characters, in so far as known, are annexed by knowledge and withdrawn from reality. The thing in itself, thus distinguished from all content, is reduced to a bare *X*, entirely devoid of qualities and characters. Thus the self-transcendence of thought seems to imply agnosticism. Knowledge can do no more than point beyond to the reality which it can never grasp. It is a confession of failure.

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[1] Cf. above, p. 108.

[2] Nor in the voluntary control of bodily actions. Cf. below, pp. 341–342.

The theory of immanence rectifies this dualism by asserting that the difference between knowledge and things, like that between mind and body, is a relational and functional difference, and not a difference of content. In the first place, we must distinguish between *immediate* knowledge and *mediate* knowledge. In the case of immediate knowledge, the thing and the knowledge are identical, except as respects their relations. Thus *a* is knowledge by virtue of its relation to a nervous system, and its presence in a context of other elements similarly related. But *a* is also 'thing in itself' by virtue of its intrinsic quality, or by virtue of its sustaining other relations than those of the type just indicated. When I perceive Mars, it is knowledge by virtue of its relation to my perceiving activity and to my other percepts, my memories, plans, feelings, etc.; but it is also 'thing in itself' by virtue of its volume, and its distance from the sun.

In the second place, however, it is necessary to recognize that in mediate knowledge, or discursive thought, there *is* a more complete difference between the knowledge and the thing. There are even cases in which the knowledge and the thing known possess little, if any, identical content. One may think about *a*, in terms of *b*, *c*, etc., as when one thinks about Mars in terms of the *words*, "Mars," "sun," etc. The theory of immanence explains these cases by saying that the thing thought about, and the thought, are both experienced. The thing transcends the thought, but it remains perceivable, or in some such manner immediately accessible; and possesses the qualities and characters which such an immediate knowledge reveals. "In such pieces of knowledge-of-acquaintance," says James, "all our knowledge-about must end." Or, as Dewey expresses it, "the meaning is one thing; the thing meant is another thing, and is . . . *a thing presented as not given in the same way as is the thing which means.*" In other words, things do not transcend knowledge, but the thing mediated or 'represented' transcends the representation; while this whole process of transcendence lies within the field of things immediately presented.[1]

The theory of immanence thus recognizes two sorts of transcendence: first, a thing's transcendence of the cognitive relation by virtue of its possession of an intrinsic quality of its own, or by virtue of its possession of other relations, such, for example, as physical relations; second, a thing's transcendence of its representation, *within* the field of cognition itself.

II. The Theory of Independence

The Half-realisms. Independence of Finite Knowledge

§ 4. The theory of immanence not only fails to establish realism;[2] but appears even to disprove it by bringing the transcendent directly into mind. It is now necessary to show that the immanent may at the same time be independent. It would not, I think, be far from the truth to say that the cardinal principle of neo-realism is *the independence of the immanent.*[3] To prepare the way for the understanding of this principle, it is necessary first to dispose of two theories which approach it so closely as to be frequently confused with it.

The first of these "half-realisms" is the doctrine promulgated by objective and absolute idealism, to the effect that reality is independent of *finite knowledge.* Reality is a norm or ideal, that cannot be dependent on finite knowledge because it is *presupposed* by it. Transcendental idealism "discovers the final ground of every immanent being, neither in that being itself, nor in a transcendent reality, but in a transcendent ideal which the knowing subject has to realize." This transcendent ideal is independent of all approximations to it, "because of the logical priority of the *ought* (Sollen) to the *is* (Sein)."

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[1] James: *The Meaning of Truth*, p. 39; Dewey: *Influence of Darwin on Philosophy, and other Essays*, p. 103, note (italics mine).

[2] The theory of immanence is held in one form or another by nearly all contemporary philosophers.

[3] I have discussed the term 'independence' more fully in "A Realistic Theory of Independence," contributed to *The New Realism.*

But this view (whether expressed in voluntaristic or in intellectualistic terms) is non-realistic, for two reasons. In the first place, "it accepts no being but that which is immediately given in the idea" — it moves entirely within the limits of experience; and in the second place, "it sets over against the judging subject as an object to which it must conform, only an ought," which can have no meaning apart from the activity of thought.[1] In short, things are dependent on experience, and experience on thought; and either form of dependence would be fatal to realism.

Independence of Mediate Knowledge

§ 5. There is a much closer approximation to realism in the pragmatist doctrine that *experience is independent of thought.* Indeed by many pragmatists this doctrine is thought to constitute realism. According to this doctrine thought is a special process of mediation; which arises within experience, and employs its terms, but without preëmpting them. The subject-object relation, the relation of meaning, the judgment of truth, these and other intellectual processes, are not essential to experience; they are arrangements into which experiences fall owing to certain practical exigencies, such as the interruption of habit, or the insufficiency of immediate knowledge. The terms of the intellectual process are intellectual only accidentally, and by virtue of certain special relationships into which they enter.

But what shall we say of experience itself? Are *things* essentially *experience*, or is this, too, a peculiar and accidental relationship? On this point, pragmatism, like most contemporary thought, is profoundly ambiguous. It would appear that while Dewey, for example, rescues reality from dependence on intellect, he is satisfied to leave it in the grasp of that more universal experience which is "a matter of functions and habits, of active adjustments and readjustments, of coördinations and activities, rather than of states of consciousness."[1] In any case the issue is clear. A thorough-going realism must assert independence not only of thought, but of any variety whatsoever of *experiencing*, whether it be perception, feeling, or even the instinctive response of the organism to its environment.

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[1] H. Rickert: *Der Gegenstand der Erkenntnis*, p. 165.

Thorough-going Realism. Independence of Experience or Consciousness

§ 6. We are now prepared for a final statement of the realistic theory of independence. It means that things may be, and are, directly experienced *without owing either their being or their nature to that circumstance.*

The radical character of this doctrine appears most clearly in connection with the contemporary use of the word 'experience.' According to realism, experience may be expressed as $(a)\ R^e$, where a is that which is experienced, and R^e the experience-relation; and where a is independent of R^e. Now the term 'experience' may be used loosely to mean either a, R^e, or $(a)\ R^e$. But if we are to regard experience as the most comprehensive manifold, it is of crucial importance to distinguish these uses of the term. To use it in either of the last two senses, in which it embraces R^e, is to arrive at a phenomenalism or panpsychism, in which the ultimate components of reality are *experiences*.[2] To use it in the former sense, to mean what is or may be experienced, but which need not be experienced, will lead to realism.

But it is better that realism should reject the term 'experience' (or even "pure experience")[3] altogether, in this ultimate application — for it gives disproportionate emphasis to an accidental feature of things. Since R^e is not necessary to things, there is no reason for limiting 'things' even to what can be experienced. Such a circumscription is groundless and misleading. Professor Montague has proposed the term "pan-objectivism";[1] but this is not altogether satisfactory, because it suggests the correlation of object and subject. The expression, 'neutral entities,' will perhaps serve better to emphasize the indifference of the terms of experience, not only to their subjective relations, but to their physical relations as well. We need some such expression with which to refer to the *alphabet* of being, as distinguished from any and all of the familiar groupings which its elements compose.

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[1] Dewey: *op. cit.*, p. 157; cf. above, p. 225.

[2] Cf. W. K. Clifford: "The elementary feeling is a thing in itself," *Lectures and Essays*, pp. 283, sq.

[3] Cf. James: "A World of Pure Experience," in *Essays in Radical Empiricism*. For James's use of the term experience, cf. above, pp. 224–225 and below, pp. 264–265.

The realist, in short, must resist every impulse to provide a home for the elements of experience, even in 'experience' itself. To bestow on them this independence may seem but a bad return for their usefulness, "since thereby they are turned out of house and home, and set adrift in the world, without friend or connection, without a rag to cover their nakedness."[2] The idealist will doubtless inquire how the facts can be "*there* independently and in themselves," without being somewhere;[3] and will be uneasy until he has brought them home to consciousness. But the realist must be satisfied to say that in the last analysis the elements of experience are not anywhere; they simply are what they are. They find a place when they enter into relationships; but they bring into these relationships a character which they possess quite independently and by themselves.

§ 7. We must now examine the arguments by which neo-realism seeks to prove its cardinal principle of independence. Owing to the present state of the question, realists have been largely occupied with the disproof of the contrary thesis to the effect that the cognitive consciousness conditions being. This contrary thesis, maintained by idealism, has obtained so wide an acceptance as to create a presumption against the theory of independence. Before establishing realism, then, it is necessary to refute idealism.

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[1] W. P. Montague: "Contemporary Realism and the Problems of Perception," *Jour. of Phil., Psych., and Scientific Methods*, Vol. IV, 1907, p. 377.

[2] Reid's comment on Hume, in his *Inquiry into the Human Mind*, p. 103.

[3] H. H. Joachim: *The Nature of Truth*, p. 40.

The Arguments for Independence. The Negative Argument

In the first place, realism contends that idealism has not proved its case. It has depended for such proof upon fallacious forms of procedure, such as those which I have named 'argument from the ego-centric predicament,' and 'definition by initial predication.' Post-Kantian idealism has contributed a further argument to the effect that the synthetic unity, or logical structure, which must be imputed to reality, is an act of thought. But this argument is also fallacious, in that it either virtually relies on one of the former fallacies, or invests 'thought' with a peculiar unifying power of which no one has ever given any intelligible account. Since the proofs of idealism have already been examined, it is unnecessary to enter into detail here.[1]

We have also found, in the second place, that idealism is beset with a difficulty of its own invention — the difficulty of *subjectivism* or *solipsism*. If consciousness is construed as owning its objects, so that they arise and perish with its several acts or states, then the knowledge of the same thing by different knowers or by the same knower at different times becomes impossible. There can be no *real* identity, but only a manifold of unique and irrelevant units of consciousness. "If we say that they resemble one another, we can only mean that the judgment that they resemble one another exists, and this, in turn, can only mean that some one judges that this judgment exists, and so on. And if we say that the *same* presentation may exist in different instances, this again can only mean that some one judges it to be so."[1] When, in order to escape this difficulty, idealism conceives of "a world *already determined by thought*," that is "prior to, and conditions, our individual acquaintance with it," then idealism has virtually withdrawn its initial version of consciousness as owning its objects, with the result that both the difficulty and the solution become gratuitous.[2] In other words, idealism cannot affirm its central thesis without taking up a position which is on its own admission untenable.

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[1] See above, pp. 156–162.

This is a suitable occasion, in the third place, for introducing an objection which idealism in its turn urges against realism. It is a negative application of 'the ego-centric predicament.' If this predicament does not prove idealism, it is argued that it at least renders it impossible to prove realism. We cannot, perhaps, prove that everything is known; but we certainly cannot, without contradiction, *know* that there is anything that is *not* known. In so far as this objection is purely dialectical, it has been sufficiently answered by Mr. Russell. "When we know a general proposition," he says, "that does not require that we should know all or any of the instances of it. 'All the multiplication-sums that never have been and never will be thought of by any human being deal with numbers over 1,000' is obviously a true proposition, although no instance of such a sum can ever be given. It is therefore perfectly possible to know that there are propositions we do not know, in spite of the fact that we can give no instance of such a proposition."[3]

The reasons for supposing that there are things that are not known must now be introduced. We have thus far done no more than to prepare the way for the realistic theory of independence, by refuting the contrary theory, and by denying the charge that the realistic theory is inherently absurd.

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[1] B. Russell: "Meinong's Theory of Complexes and Assumptions," III, *Mind*, N. S., Vol. XIII, 1904, p. 513. Cf. *passim.*

[2] T. H. Green: *Prolegomena to Ethics*, third edition, p. 38 (italics mine). Cf. above, pp. 162–163.

[3] B. Russell: "The Basis of Realism," *Jour. of Phil., Psych., and Scientific Methods*, Vol. VIII, 1911, pp. 160–161. For the idealistic argument, cf. J. F. Ferrier, on "Agnoiology," or Theory of Ignorance, *Institutes of Metaphysics*, pp. 405, sq.

The Argument from the Externality of Relations

§ 8. The most general argument for realism is an application of the theory of the *external* or *extrinsic* character of relations. According to the contrary view, relations penetrate, possess, and compromise their terms, so that it is impossible to separate the terms from the relation without destroying them. But according to the theory of the externality of relations, terms acquire from their new relations an added character, which does not either condition, or necessarily alter, the character which they already possess.

The procedure of logic and mathematics — any procedure, in fact, which employs the method of analysis — is necessarily committed to the acceptance of the externality of relations. The method of analysis presupposes that the nature and arrangement of the parts supplies the character of the whole. If such were not the case the specification of the parts and their arrangement would not afford a description of the whole, and one would have to be content with an immediate or mystical apprehension of it. Analysis and description by specification would not constitute knowledge at all, did not things actually possess the structure $(a)R(b)$, made up of the intrinsic characters a and b, in the relation R. This does not mean that complexes may not be dependent on one another, that $(a)R(b)$ may not cause $(c)R(d)$; but only that if such is the case, the relations are nevertheless something *added to the terms*. Just as a does not derive its content from $R(b)$, so $(c)R(d)$ does not derive its content from the causal relation to $(a)R(b)$; it simply possesses that causal relation *over and above* the content it possesses by virtue of its component terms and relation. It happens that that which is c and d in the relation R is *also* causally dependent on $(a)R(b)$.

Now what is the application of this to the question of the dependence of things on knowledge?[1] It shows, in the first place, that the *content* of things is in no case made up of relations beyond themselves. So the content of a thing cannot be made up of its relation to consciousness. Of course, the *consciousness of a thing* is made up of the thing and its relation to consciousness. But the thing then contributes its own nature to the conscious complex, and does not derive it therefrom. If *a* is in relation to consciousness, then *consciousness-of-a* is constituted in part of *a*, but *a* itself is not constituted of consciousness. It follows, in the second place, that whether the relation of a thing to consciousness is a relation of dependence or not, is an empirical question. It is necessary *to examine the relation, and see.* In other words, it is impossible to infer dependence simply from the fact of relation. It is impossible to argue that 'independent reals' must stand absolutely out of relation to consciousness, if they are to be independent.

The theory of the externality of relations is not sufficient in itself to establish the case for realism. Indeed it is so general in scope as to argue pluralism rather than realism.[2] It shows that the nature of things is prior to the relations into which they enter, and that the nature of these relations, whether of dependence or not, is an extrinsic fact. So that we are left to conclude that many things are interdependent or not, as the facts may prove. But it remains for realism to investigate the precise nature of the relation of things to consciousness, to discover whether or no this is a relation of dependence. And this is now a question of fact, like the question of the relation of the tides to the moon, or the relation of Mother Goose to the atomic weight of hydrogen.

[1] Cf. Russell: *op. cit.*, and " On the Nature of Truth," *Proc. Aristotelian Soc.*, N.S., Vol. VII, 1906–1907, pp. 37–44; E. G. Spaulding: "*The Logical Structure of Self-Refuting Systems*," *Phil. Review*, Vol. XIX, 1910, pp. 276–301; and above, pp. 244–246.

[2] Precisely as the contrary theory argues monism rather than idealism, cf. Royce: "*The World and the Individual*, Vol. I, Lect. III. For pluralism, cf. above, pp. 242–249.

The Argument from the Distinction between Object and Awareness

§ 9. The empirical argument for realism turns upon the nature of mind, and the specific kind of relationship which the mind's objects sustain to it. It must, of course, be assumed that consciousness *is* a relationship, as has been shown in the foregoing chapter. But first I propose to consider an intermediate argument to the effect that consciousness is *different* from its object This is the main contention of Mr. G. E. Moore in the several papers which he has contributed to this subject. The idealist "maintains that object and subject are necessarily connected, mainly because he fails to see that they are *distinct*, that they are *two*, at all. When he thinks of 'yellow' and when he thinks of the 'sensation of yellow,' he fails to see that there is anything whatever in the latter which is not in the former." But it is evident that "sensation of yellow," contains over and above "yellow," the element, "sensation," which is contained also in "sensation of blue," "sensation of green," etc. "Yellow exists" is one thing; and "sensing" it is another thing.

In other words, the object of a sensation is not the sensation itself. In order that a sensation shall be an object, it is necessary to introduce yet another awareness, such as introspection, which is not at all essential to the meaning of the sensation itself. And "the existence of a table in space is related to my experience of *it* in precisely the same way as the existence of my own experience is related to my experience of *that*." In both cases awareness is evidently a "distinct and unique relation," "of such a nature that its object, when we are aware of it, is precisely what it would be, if one were not aware."[1]

But what awareness is, further than this, Mr. Moore does not inform us. Mr. Russell adds that it is "utterly unlike other relations, except that of whole and part, in that one of its terms presupposes the other. A presentation . . . must have an object."[1] But there is so little to stand for it *besides* the object, that one could scarcely be blamed if he allowed Mr. Moore's distinction to lapse. Furthermore, while Mr. Moore's argument does prove that the object does not contain or by itself imply being experienced, it does not prove that it may not actually stand in some sort of dependent relation to that circumstance. The 'table is in my room,' does not contain awareness. But neither does it contain 'transportation,' although it may, as a matter of fact, have been put there by an expressman. And similarly it may, despite Mr. Moore's argument, have been put there by awareness. Such indeed would be the case, were I merely *imagining* the table to be in my room, or judging *falsely* that the table was in my room. As Mr. Russell himself admits in a later discussion, it is possible that 'table,' 'my room,' and the relation 'in,' should all be related to mind, and compose an aggregate on that account, although the table is not actually *in* the room.[2] In other words, awareness creates an indirect relation among its objects, by virtue of bringing them severally into the direct relation of awareness. And it is open to anyone to maintain that this indirect relation is the *only* relation which things have *inter se;* or that any specific relation, such as the physical relation, is a case of this indirect relation; or that things are actually brought into new cross-relations by means of this indirect relation.

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[1] G. E. Moore: "The Refutation of Idealism," *Mind*, N.S., Vol. XII, 1903, pp. 442, 449, 453. Cf. also, "The Nature and Reality of Objects of Perception," *Proc. of the Aristotelian Soc.*, N.S., Vol. VI, 1905–06.

The Argument from the Nature of Mind

§ 10. We need, in other words, to forsake dialectics, and observe what actually transpires. We then find that consciousness is a species of function, exercised by an organism. The organism is correlated with an environment, from which it evolved, and on which it acts. Consciousness is a selective response to a preëxisting and independently existing environment. There must be something to be responded to, if there is to be any response. The spacial and temporal distribution of bodies in its field of action, and the more abstract logical and mathematical relationships which this field contains, determine the possible objects of consciousness. The actual objects of consciousness are selected from this manifold of possibilities in obedience to the various exigencies of life.

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[1] B. Russell: *op. cit.*, p. 515.

[2] "Every judgment is a relation of a mind to several objects, one of which is a relation; the judgment is *true* when the relation which is one of the objects relates the other objects, otherwise it is false." B. Russell: *Philosophical Essays*, p. 181.

It follows that the objects selected by any individual responding organism compose an aggregate defined by that relationship. What such an aggregate derives from consciousness will then be its *aggregation, and nothing more.* A subjective manifold will be any manifold whose inclusion and arrangement of contents can be attributed to the order and the range of some particular organism's response. The number of the planets, for example, and their relative distances from the sun, cannot be so accounted for; but the number of the planets *which I have seen*, the temporal order in which *I have seen them*, and their *apparent* distances, *can* be so accounted for. In other words, the full astronomical nature of the planetary system, together with the particular circumstances of my sensibility, defines a limited manifold which is called the planetary system *for me*, or so far as belonging to my mental history. The physical planetary system is thus prior to and independent of each and every mental planetary system. And every question of subjectivity or objectivity is to be tested in the same fashion.

III. Truth and Error

The Realm of Subjectivity

§ 11. The proof of the independence theory from an examination of the concrete nature of mind, defines at the same time the principle which must be employed in solving the problems connected with subjectivity. We have found that the selective action of consciousness not only invests things with the character of 'object' or 'content;' but at the same time, according as it excludes or includes, also defines characteristic fragments, foreshortenings, and assemblages of things, that may not coincide with physical and logical lines of cleavage. And these may be said to be subjective.

The clearest instance of subjectivity in this sense is *perspective*, or *point of view*; in which a projection defined by the position of the organism is abstracted from the plenum of nature. Such an experience does not create its content but distinguishes it, by virtue of bringing some of the environment into a specific relation that is not sustained by the rest. The so-called 'secondary qualities,' such as heat, color, sound, etc., must be dealt with by the same principle. The simple qualities themselves evidently cannot be subjective, any more than they can be physical. How far, if at all, the spacial and temporal relations of these qualities may be regarded as subjective, will depend entirely on how far these relations may be attributed to the sentient action of the organism.[1]

Subjective manifolds, or fictions, once instituted by the action of consciousness, may become stereotyped. They may be remembered or described; and through tradition and art, they may be incorporated more or less permanently into the environment. Such being the case, they may be mistaken for what they are not, and thus give rise to illusion and error.

The Sphere of Truth and Error

§ 12. Subjectivity accounts for the possibility of error; but it does not in itself constitute error. It is possible for the mind to "entertain" daring and original speculations, go "wool-gathering," build "castles in Spain," or "imagine a vain thing," without committing error. A highly speculative or imaginative mind incurs a peculiar liability to error, which is the price it pays for its greater chance of truth. But there is no error until fiction is mistaken for fact; and there is no truth in the correlative sense, until a content of mind is rightly taken to be fact. Error and truth arise from the practical discrepancy or harmony between subjective manifolds and the manifolds of some independent order.

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[1] For the application of this method, cf. W. P. Montague: "Contemporary Realism and the Problems of Perception," *Jour. of Phil., Psych., and Scientific Methods*, Vol. IV, 1907, No. 14; T. P. Nunn: "Are Secondary Qualities Independent of Perception?" *Proc. Aristotelian Soc.*, N.S., Vol. I, 1900–01; E. B. Holt: "The Place of Illusory Experience in a Realistic World," in *The New Realism*.

It is characteristic of truth, says Mr. Russell, to be a "mixture of dependence upon mind and independence of mind." Contemporary controversies concerning truth have been largely due to the attempt to place it wholly without mind or wholly within. The former attempt, illustrated by Mr. Russell's earlier view, leads inevitably to the admission of "objective falsehoods," an admission which is "the very reverse of plausible."[1] The attempt, on the other hand, to place truth wholly within the mind, leads to even more insuperable difficulties. This attempt is illustrated by Mr. Joachim's monistic-idealistic theory of truth, according to which truth is the "systematic coherence" of the absolute whole of experience. The distinction between truth and error reduces to the difference between complete and partial experience. But the result is that, humanly speaking, there can be no truth, even the truth that there is truth; since even Mr. Joachim's experience is partial, and there is thus no way of distinguishing his theory of truth from error.[2]

Pragmatism alone has consistently maintained that truth and error have to do with the action of mind in relation to an environment. Truth is neither coherence among *things* merely, nor the complete internal coherence of *thought;* but *a harmony between thought and things*. Similarly, error is neither an incoherence among things merely, nor the incomplete coherence of thought; but a discrepancy between thought and things. Pragmatism has maintained, furthermore, that the harmony and discrepancy in question is practical. It is not sufficient to say that a true belief must have a thing corresponding to it, for false belief has its object as well. Nor will it do to say that a true belief must resemble a thing: because, in the first place, that is not sufficient, since a belief must *mean* its object; and because, in the second place, it is contrary to fact, since it *need* not resemble its object. There seems to remain only the alternative of regarding truth as a kind of right action on a thing, and error as a kind of mistake.

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[1] B. Russell: *op. cit.*, pp. 184, 177, 173. Cf. "On the Nature of Truth," *Proc. Aristotelian Soc.*, N.S., Vol. VII, 1906–1907, pp. 44–49.

[2] H. Joachim: *The Nature of Truth*, ch. III; cf. above, pp. 184–188. Mr. Joachim himself admits the difficulties of his position; cf. Ch. IV. For Mr. Russell's criticism, see "The Monistic Theory of Truth," *Philosophical Essays.*

But pragmatism, also, has been betrayed into a characteristic difficulty. Through excessive emphasis on the practical aspect of truth, it has seemed to make truth after all subjective; and without that insurance against a vicious relativism which idealism obtains from its conception of an absolute subject.[1] It is possible, I think, to formulate a theory that shall possess the merits of these views without succumbing to their difficulties.

Mistaking and Right Judging

§ 13. Truth and error arise when some content of mind is further dealt with in a characteristic fashion. It is possible for the mind to apprehend, speculate, or imagine, merely; but in this there is neither truth nor error. It is also possible for the mind to *believe*, that is, *adopt*, for the purpose of action. The truth or error of the belief is then relative to the interest and the circumstances which determine the success of the action. Thus I may accept the content of my perception as something to be dealt with physically, in the interest of self-preservation. In case such action is well taken, it is true; in case it is mistaken, it is false, or illusory. But the same content may be dealt with in another fashion without error. I may, for example, disbelieve it, or discount it, with reference to my physical action; or being interested, let us say, in the collection of instances of illusion, I may count it as one.

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[1] For the pragmatist theory, cf. above, pp. 203–213.

On the other hand consider the case of an idea in the discursive sense, an idea *of* something. It is an idea of something by virtue of the fact that it is connected through my plans or expectations with some portion of the environment. And in this case, there is nothing intrinsically either true or false in *a*, or in any relation of *a* to *b*, except that of my intention. Whatever *a* be, whether fact or fiction, it is then true only when the use I make of it is successful; or false when the plans I form with it, or the expectations I base on it, fail.

If this be regarded as subjectivistic, it can only be because of the assumption that the determination of success and failure is subjective. But such is not the case. Success and failure are determined by interest, means, *and circumstance*.[1] If it will not do to fish for mermaids, this is because the facts are not consistent with the method I employ in the interests of livelihood. In the last analysis the reason for my folly lies in the fact that the image of a mermaid is a composite generated by the selective abstracting and grouping of consciousness. The fact loosely expressed in the judgment, 'there are no mermaids,' is that mermaid is a subjective, and not a physical, manifold. Hence it must be treated accordingly, if one is to deal with it successfully. And similarly, if my theoretical hypothesis is a mistaken one, this is because the locality to which my hypothesis refers me thwarts the theoretical purpose for which I have the hypothesis.

So far is it from being true that success and failure are subjective, that the subjective satisfaction or discontent may themselves be misleading. I may have the right idea when I am most discontented; I may serenely mistake fiction for fact, and heartily enjoy my illusions. And success and failure may be foredoomed without being consummated, as one may have the right key without unlocking the door, or play the fool without paying the penalty.

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[1] Cf. below, pp. 333-334.

The absolute thus reappears in the commonplace guise of fact. Mind operates in an environment, and succeeds or fails, according as it meets or violates the terms which the environment dictates. Truth is the achievement, and error the risk, incidental to the great adventure of knowledge. But eternal being, and the order of nature, are not implicated in its vicissitudes. So that if there be any virtue in these terms "Eternal," "Order," or "Absolute," they can be transposed without loss.

CHAPTER XIV

A REALISTIC PHILOSOPHY OF LIFE

Enlightenment and Disillusionment

§ 1. It will doubtless appear to most readers of this book that realism is a philosophy of disillusionment. And in a sense this is the case. As a polemic, realism is principally concerned to discredit romanticism; that is the philosophy which regards reality as *necessarily* ideal, owing to the dependence of things on knowledge. Realism, in other words, rejects the doctrine that things must be good or beautiful or spiritual in order to be at all. It recognizes the being of things that are wholly non-spiritual, of things that are only accidentally spiritual, and of things that, while they belong to the domain of spirit, nevertheless antagonize its needs and aspirations. The universe, or collective totality of being, contains things good, bad, and indifferent. But before one hastily concludes that realism discourages endeavor and discredits faith, one will do well to recall that there is a sense in which disillusionment is a source of power.

Life has maintained itself, and promoted its interests, in proportion as it has become aware of the actual character of its environment. It is the practical function of intelligence, not to read goodness into the facts, but to lay bare the facts in all their indifference and brutality; so that action may be contrived to fit them, to the end that goodness may prevail. Well doing is conditioned by clear seeing. The development of intelligence as an instrument of power has consisted mainly in freeing it from the importunity of ulterior motives; and in rendering it an organ of discovery, through which the native constitution of things is illuminated and brought within the range of action.

Achievement means *taking advantage of things*; and it is the function of intelligence to present things, roundly and fearlessly, so that they may serve advantage.

The civilization of nature has proceeded *pari passu* with the abandonment of the notion that nature is predetermined to human ends, and the recognition that nature has odd and careless ways of its own. It is the discovery of the independent mechanisms of nature, that has put tools into the hands of man. The civilization of society has been served best by those who have been most clearly aware of its present failure. Similarly, within any field of individual endeavor it is the sanguine or complacent temperament that is ineffective. It is the man who has no *illusions* of success, that veritably succeeds — the man that measures with a cool eye the length he has to go, and can audit his own accounts without over-estimating his assets.

All this would be too obvious to repeat, did it not have an important bearing on the present state of philosophy. The "new enlightenment," with which realism is allied, would extend this principle of success to the larger issues with which religion and philosophy have to do; but finds that the ascendant philosophy, romanticism, is based upon another principle. Men are to be reassured and comforted by being guaranteed the eternal preëminence of the good. Their hope is to lie in the fact that the indifference of nature and the failure of man are apparent and not real. Their hope is to be realized by that act of imagination or thought which recovers the whole, and seeing it, judges it to be good. Philosophy is itself to make things good; since no more is necessary to the goodness of things than their "synthetic unity."

Realism, on the other hand, proposes that philosophy, like science, shall illuminate things in order that action may be invented that shall make them good. Philosophy must enable man to deal with, and take advantage of, his total environment, as science adapts him to his proximate physical environment. It must exhibit a like forbearance; and avoid confusing the present opportunity, mixed and doubtful as it is, with the dream of consummate fulfilment. For the question, "What shall I do to be saved?" is in principle like any other question of expediency or policy: the answer depends on what actual dangers imperil salvation, and what actual instruments and agencies are available for the achieving of it. To argue the eternal and necessary goodness of things from the implications of knowledge, is to encourage a comfortable assurance concerning salvation, when it is the office of religion to put men on their guard and rouse them to a sense of peril.

If, then, realism is a philosophy of disillusionment, this cannot be said to its disparagement. Realism does, it is true, reject the notion that things are good because they must be thought to be so; but it does not in the least discourage the endeavor to make them good, or discredit the hope that through endeavor they may become good. On the contrary, in the spirit of all true enlightenment, it removes illusions only in order to lay bare the confronting occasion and the available resources of action.

Realism and the Dependence of Value on Desire

§ 2. A philosophy of life must always contain two principal components, a theory concerning the nature of goodness or value, and a theory concerning the conditions and prospect of its realization. The former is the central topic of ethics, and the second is the central topic of a philosophy of religion.

In discussing the nature of goodness or value, I find myself in disagreement with certain eminent realists with whom I should much prefer to agree. Mr. G. E. Moore and Mr. Bertrand Russell both contend that goodness is an indefinable quality which attaches to things independently of consciousness. Thus Mr. Moore says: "If I am asked 'What is good?' my answer is that good is good, and that is the end of the matter . . . . Being good, then, is not identical with being willed or felt in any kind of way, any more than being true is identical with being thought in any kind of way." [1]

This view arises, I believe, largely from a misconception of the precise scope of that fundamental realism to which both of these writers subscribe. There are two realistic contentions that are germane to the question of values. In the first place, consciousness is a relation into which things enter without forfeiting their independence. To be conscious of *a* means that it is acted on in a peculiar manner; and while this action gives *a* a new status and new connections, it does not condition the being of *a*, or give it its character as *a*. Thus if I desire *a*, it becomes a *thing desired*, and is connected in a new way with the other things which I desire, or with the things I remember, perceive, etc.; while it nevertheless *is*, and is *a*, quite independently of this circumstance. But it is entirely conceivable that the *value* of *a* should consist in its being desired; in other words, in that specific relationship which the desiderative consciousness supplies. We should then say that the being or nature of things is independent of their possessing value, but not that *their possessing value* is independent of consciousness; any more than Mr. Russell himself would say that a proposition's being true is independent of consciousness, although the proposition itself is quite independent of its being true.[2]

In the second place, it is essential to realism to maintain that a proposition is independent of its being judged. But, as we shall presently see, this in no way contradicts the supposition that values are functions of consciousness. For it is quite possible that the proposition, 'I desire *a*,' should be quite independent of all opinion in the matter. What I actually desire is dependent neither on what you think about it, nor even on what I think about it myself.

In any case, there seems to be no doubt of the fact that things do derive value from their being desired, and possess value in proportion as they are desired.[1] This is not to be deduced, and so far, Messrs. Moore and Russell are correct,[2] from the general idealistic arguments. It is not to be argued from the fact that whenever values are found they stand in relation to the finding of them. It is to be argued only from the fact that whenever values are found they stand in relation to some desire or interest, the present finding being itself entirely negligible. Thus, if a value may be represented as $(a)\ R\ (M^1)$, where a is anything, R is the relation characteristic of consciousness, and M^1 a particular desiring subject; then, the finding of value must be represented as $[(a)\ R\ (M^1)]\ R\ (M^2)$, where M^2 represents the *finding* subject, and where the smaller relationship is quite independent of the larger. Nevertheless we find empirically that *anything whatsoever* acquires value when it is desired. There is no quality, or combination of qualities, that is inherently valuable; or incapable of possessing value; or exclusively valuable in the sense that things must be valueless without it. Such interests as that of desultory curiosity, or promiscuous acquisitiveness, may invest *anything* with value; and there is nothing so precious that its value would not disappear if all needs, likings, and aspirations were extinguished.

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[1] Cf. Moore: *Principia Ethica*, pp. 6, 137. Cf. Russell: "The Elements of Ethics," in his *Philosophical Essays*, pp. 4–15.

[2] Cf. above, p. 325.

The Nature of Moral Value. The Right and the Best

§ 3. As value in general arises from a relation to interest, so moral value arises from the complexity and mutual relations of interest. To understand the peculiar character of moral value it is necessary to introduce two conceptions, that of *rightness*, and that of *comparative goodness*. Rightness is the character possessed by action that conduces to goodness. When an interest is confronted by an occasion, or particular phase of the environment, there is an action which will so meet the occasion as to fulfil the interest. This is the *right act in the premises.* Thus an organism governed by the instinct of self-preservation will act rightly if it takes the food and leaves the poison, or attacks the weaker enemy and shuns the stronger. The right act is the act which takes advantage of circumstance; advantage being relative at the same time both to the interest which governs the agent, and to the situation which confronts him.

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[1] For a fuller treatment of this topic, cf. the author's article entitled "The Definition of Value" in *Jour. of Phil., Psych. and Scientific Methods*, Vol. XI, 1914, No. 6; and his *Moral Economy*, Ch. I, II (on moral value), and Ch. V (on aesthetic value).

[2] Cf. Moore: *op. cit.*, §§ 77, 85.

But rightness is not necessarily moral; it may be merely intelligence or expediency. Moral values appear only when there is a question of comparative value. And this question arises from the contact and conflict of interests. That which is one interest's meat is another's poison. The act which is right in that it promotes one interest, is, by the same principle, wrong in that it injures another interest. There is no contradiction in this fact, any more than in the fact that what is above the man in the valley is below the man on the mountain. There is no contradiction simply because it is possible for the same thing to possess several relations, the question of their compatibility or incompatibility being in each case a question of empirical fact.

Now just as an act may be both right and wrong in that it conduces to the fulfilment of one interest and the detriment of another; so it may be doubly right in that it conduces to the fulfilment of two interests. Hence arises the conception of comparative goodness. If the fulfilment of one interest is good, the fulfilment of two is better; and the fulfilment of *all* interests is best. Similarly, if the act which conduces to goodness is right, the act that conduces to more goodness is more right, and the act which conduces to most goodness is most right. Morality, then, is *such performance as under the circumstances, and in view of all the interests affected, conduces to most goodness.* In other words, that act is morally right which is *most right.*

It follows that in the moral sense an act cannot be both right and wrong. It is quite possible that the maximum goodness should be equally well promoted by several acts, and in this case all such acts would be morally right. But none of them could be morally wrong, because that would require that it should be conducive to less goodness than some other act, and this by definition is not the case.

The Objectivity or Absoluteness of Value. Contemporary Confusion of the Issue

§ 4. We are now prepared to deal with a further question that has assumed prominence in contemporary discussions. "Our question is," says Professor Münsterberg, "whether we have to acknowledge anything in our world as absolutely valuable."[1]

This question can be answered only by dividing it. In the first place, values are not absolute in the sense of being independent of all consciousness. They are relative to desire or interest. Furthermore, values are not absolute in the sense of being independent of individual or particular interests. They are relative not only to individual interests, but to the conflict or opposition of interests; so that they are at the same time both positive and negative, good and bad.

But moral value transcends this relativity because it includes it. There is a maximum value, or *summum bonum*, which is not entirely relative to any particular interest, simply because it is relative to all interests. It is not a pure goodness or perfection, free from all the qualifying conditions of life, but *the best for existing interests under existing circumstances*. Such a best may be said to be absolute, however, in the sense that it is best unambiguously; it cannot be also not the best.

Finally, and this is our most important conclusion, all values whatsoever are absolute in the sense that they are independent of opinion. If *a* is good, in that I need, like, or aspire to it; *that fact* can be neither made nor unmade by any judgment or opinion concerning it. The general acceptance of so obvious a truth is prevented by a widespread confusion between simple *desire*, and *judgment of value*; the relativity of value to the former being construed as a relativity to the latter. This confusion is due to the fact that there are *affective judgments*, in which one both desires an object and at the same time pronounces it good. To avoid the confusion, it is necessary to deal with these components discriminatingly: and to say that while the element of desire *invests* its object with goodness, and is thus a *fact* of value; the element of judgment is, like all judgments, liable to truth and error according to its agreement or disagreement with fact.

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[1] *Eternal Values*, p. 9. I have dealt with this question, with special reference to its ambiguity, in an article entitled "The Question of Moral Obligation," *Inter. Jour. of Ethics*, Vol. XXI, 1911. Some paragraphs of this article are reprinted in what follows.

This distinction is obscured and the whole experience given a 'pseudo-simplicity' by such notions as 'appreciation,' and 'evaluation,' or Westermarck's "emotions of approval." These hybrids are supposed to be at the same time judgments in form, and facts as respects their freedom from error. But this is simply to exploit the equivocation which their dual nature makes possible. "To name an act good or bad," Westermarck says, "ultimately implies that it is apt to give rise to an emotion of approval or disapproval in him who pronounces the judgment." And again: "The moral concepts, then, are essentially generalizations of tendencies in certain phenomena to call forth moral emotions." By such considerations Westermarck believes that he shows that "the presumed objectivity of moral judgments thus being a chimera, there can be no moral truth in the sense in which this term is generally understood."[1] Now the "moral emotion" either does or does not contain a judgment. If it does contain a judgment predicating goodness of an act, then that judgment is either true or false according as the act is or is not "apt to give rise to an emotion of approval" in the judge. If it does not contain a judgment, if it is simply an "indignant" or "kindly" emotion evoked by the act, then it is merely *evidence* for the truth or falsity of a judgment *about* the goodness of the act. In either case, there can be no doubt of the objectivity or truth of moral judgments.

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[1] Westermarck, *Origin and Development of the Moral Ideas*, Vol. I, pp. 4, 5, 17.

If it is not permitted to define *simple* goodness or value in terms of an approving judgment, the prohibition is more positive and unmistakable in the case of *moral* value. For here it is not sufficient, as in the case of value in general, that there should be a simple and direct relation to a certain form of consciousness. What one ought morally to do is not simply what one wants to do; it must be proved to be the *right* or the *best*, as having a certain more elaborate determination. Thus a right act is an act which produces good, that is, fulfils an inciting interest, in a given situation. It is therefore determined by such a configuration regardless of opinion, which may be either correct or incorrect. Similarly, what is best, is a quantitative derivative of what is good. It must depend on the prior nature of goodness and whatever category of quantity is here applicable. It is not uncommonly supposed that if what is desired is good, then what is *preferred* is best. But the same vicious ambiguity is present here. If preference is regarded simply as a quantitative variation of desire, simply as more of desire, then it may possibly afford a means of defining quantitative variations of goodness. In this case, however, the fact would have to be ascertained by some method of measurement, and no authority could be attached to the agent's mere profession of preference. If, on the other hand, preference is taken to mean a judgment to the effect that one act is better than another, then reference is made to a predicate 'better'; which, since it stands in some objective relation to another predicate 'good,' can be used either correctly or incorrectly.

It would appear, then, that the definition of goodness in terms of relation to desire, while it may easily lead to confusion, does not in fact lend any support whatever to the attempt to reduce moral values or obligations to the judgments concerning them, and is therefore not relativistic in any vicious or sceptical sense. And such being the case, there is no need of the characteristic idealistic remedy. Value having been first defined as 'what I judge to be valuable,' this is amended by idealists to read, 'value is what I judge to be valuable, *when I judge truly*.' The qualifying phrase is added as a means of averting the sceptical consequences of the rest. Lest the conflicting judgments of mankind shall so annul one another as to reduce value to the caprice of private opinion, *true* value is reserved for a standard or absolute judgment.

The general theory of which this is a special application has already been examined; but the ethical application affords a striking illustration of its futility. For we are at once set to inquiring concerning the distinguishing marks of this true judgment of value, so that we may know it from the false. We are as much enlightened as an astronomer would be, were he informed that the weight of Neptune is what a true judgment would pronounce it to be. And if the term 'true' is replaced by such terms as 'eternal,' 'standard,' 'universal,' 'necessary,' 'objective,' or 'consistent,' nothing is gained, for these are only figurative or synonymous expressions for the same thing.

This accounts for the emptiness of Kant's famous "categorical imperative."[1] To "act only on that maxim whereby thou canst at the same time will that it should become a universal law," cannot mean that you should expect others to *act* as you do, or that you should merely be able to will that they should *think* as you do. There is no act which can be exactly repeated; and there is no maxim which cannot as a matter of fact be willed to be law universal. Kant can only mean that you should so act as to be confirmed in your act by every impartial critical judgment that is in possession of the facts. In other words, you should act on a *true maxim*, or you ought to do what it is *truly right to do*. But to determine what it is truly right to do, it is necessary to turn to the objective context of action.

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[1] Kant: *Metaphysic of Morals*, trans. by Abbott ("Kant's Theory of Ethics"), p. 38.

Thus to give values the absoluteness or objectivity of fact, it is necessary only to distinguish carefully between the fact of desire which invests its objects with value, and judgments concerning such facts. "If one understands . . . by valuing (Wertung) exclusively the affectional disposition which lies at the basis of the value relation," says Ehrenfels, "then it is clear that valuing either exists or does not exist, but can be neither true nor false, inasmuch as these attributes can attach only to judgments."[1] The relativity of value to 'valuing,' or to some desiderative action of mind, no more prejudices its 'objectivity,' than does their relativity to parents prejudice the objectivity of offspring. Values are in this epistemological sense as absolute as any other fact — no more, no less.

The Difference between the Absoluteness and the Supremacy of Value

§ 5. There is another possible meaning of 'absolute value,' which I have purposely reserved for special treatment. Is value absolute in the sense of *possession* or *realization?* Is value the universal or fundamental determination of things? To this question we must now turn. It is important first to distinguish clearly between the absoluteness of values in the above epistemological sense, and in this metaphysical sense.

The discovery that values possess their natures, and obey their laws, independently of opinion, does not in the least guarantee their supremacy. Nor is their metaphysical status improved if they are denominated "eternal." Whatever judgment is true, such as 'justice is right,' is eternal in the sense that it is true regardless of the time at which it may be pronounced. This would be the case even if it happened that the rightness of justice was relative to a temporal epoch of civilization. For there would then be a proposition predicating its rightness of that epoch, which would be true at all epochs. And a like 'eternity' would attach to the proposition, 'I once liked figs,' or, 'savages praise homicide.' It is, however, possible to discover some propositions that hold of life independently of any particular historical epoch, propositions defining the broad generic features of life. Such propositions will contain time, in that life is temporal; but they will contain time as a variable or universal, and so will hold at all particular times. Such propositions constitute the fundamental principles of theoretical ethics.

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[1] C. V. Ehrenfels: *System der Werttheorie*, p. 102; cf. pp. 102–107. It must be admitted, I think, that the substitution of *Wertung* (valuing) for *Begehrung* (desiring) is unfortunate, owing to the readiness with which the former term is confused with judicial "evaluation." The writers of this school ('the Austrian School') are by no means wholly guiltless of confusion.

But propositions concerning value may hold *at* all times, and even *for* all time, and yet be metaphysically insignificant. It may be objectively and universally true that justice conduces to abundance of life, but this no more insures abundance of life, than does the equal objectivity and universality of the law, 'the wages of sin are death,' insure the extinction of life. The principles of value are abstract, and they themselves no more determine the extent to which they shall be embodied in nature and society, than do the principles of geometry define the number of physical solids that shall actually exist.

It is this second question with which religion is concerned. It is vain, therefore, to attempt to ground religious faith, as the Ritschlians have attempted to do,[1] on the mere *validity* of values. For religious faith has to do, not only with the truth that there are values, but *with the hope that they may prevail.* And such a hope can be justified only empirically, by an examination of the relation of values to existence. Are values effectual? Do they in any sense constitute the ground of existence? Is there evidence to show that they will, in the long run, control existence?

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[1] Cf. W. Hermann: *Die Metaphysik in der Theologie;* cf. criticism by O. Pfleiderer: *Philosophy of Religion*, trans. by Stewart and Menzies, Vol. II, pp. 188, sq.

Value as Cause or Determination

§ 6. The first of these questions, concerning the effectuality of values, can be answered only in the light of a clear conception of the nature of causality or determination. Is there such a thing as *moral causality?* On the face of it, there is. Nothing is more apparent than the fact that, within limits, man does what he wants — reaches his ends, executes his designs. But it is customary to suppose that science in this case discredits appearances. It is supposed that the claim for moral causation rests on a confused notion of causation, the only clear and demonstrable causation being exhibited in mechanical laws.

We should, I think, be forced to accept this conclusion if moral causation were necessarily identified with the *feeling of activity.* Naturalism is quite correct in asserting that the only intelligible and verified cases of causation are cases of determination by law.[1] But what if there be cases of determination by moral as well as by mechanical law?

Physics discovers mechanical laws by looking for the constant features of physical change; especially such as may be expressed as mathematical ratios of space, time, and their complex derivitives. An event is said to be explained by a law, when it can be deduced by assigning particular values to the variables which the law comprises. But when *life* is observed, it exhibits constancy of another type, a constancy of interest. The complex motions of an organism may be, and are, explained, by regarding them as particular instances of self-preservation. Similarly, the biographer seeks to discover certain general motives, such as ambition, cupidity, or love; and having such motives in mind, he is enabled to show the unity and consistency of a life that would otherwise be a mere aggregate and sequence of actions. Steadiness of purpose is no less, and no more, a matter of fact than conservation of energy. If it be true that the kinetic energy of my actions is quantitatively proportionate to the chemical energy of the nutritive substances which I consume, it is not less true that my actions exhibit a qualitative uniformity which can only be expressed in terms of the interests that govern me. In the one case as in the other, the law is a descriptive summary of change; relating differences to an underlying identity, and novelties to an underlying permanence.

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[1] Cf. above, pp. 99–100.

It is customary to suppose that the accepted validity of mechanical laws somehow stands in the way of the operation of interest. But it would be precisely as reasonable to argue that the *de facto* existence of interests stands in the way of the operation of force and energy. The supposition of an absolute incompatibility between mechanism and interest is, however, contrary both to reason and to fact. There is no reason why an identical process should not obey many laws, and laws of different types; once we are rid of the fallacy of 'exclusive particularity.' It is entirely possible, in other words, that a process should exhibit constancy in several respects. Whether such multiple determination is possible *in any given case* is a question of fact.

And, turning to the case before us, it is evident that such multiple determination is the fact. I weigh a certain number of pounds in relation to the mass of the earth, and at the same time am actuated by certain political motives. Though my energy be proportionate to my nutrition, it may none the less be expended to good or bad ends. And though the race of mankind crawl upon the surface of a planet from which they have sprung, and though their every action must comply with conditions imposed by a physical environment, it is not less true that these actions exhibit the characters of civilization. They satisfy needs, carry out wishes, and progressively realize certain common and ideal aspirations.

§ 7. There is sufficient ground, then, in reason and in fact, for asserting *that interests operate*, that things take place because of the good they promote. And this, I think, is the meaning of freedom, both as an actuality and as a prerogative. I can and do, within limits, *act as I will.* Action, in other words, is in a measure governed by desires and intentions. And this measure is capable of being increased, as knowledge, skill, and coöperation develop. There is even a possibility and prospect of its increase to a point at which values shall enter into possession of the world at large, as they have already come to possess it in part.

Freedom, Positive and Negative

There is also a negative freedom. There is freedom from the exclusive control of mechanical laws. Indeed, it may be said that, in a certain sense, the control of life by moral laws takes precedence of its control by mechanical laws. For the unit of life, the animal and human individual, is a moral and not a mechanical constant. An individual life is distinguished by what it seeks to preserve and promote. It is disjoined from the spacial and material continuum in which it is immersed, by its partiality, by the specific bias and preference which animate it. It may even be said that in a measure life is independent of mechanism. For if an individual life is defined by its interests, then it will be identified with a physical environment to just the extent, and no more, that its interests are physical. If any life can be said to consist of interests that are independent of the spacial and temporal juxtaposition of things, if its interests can be said to be capable of realization under other circumstances and through other means, then there is ground for saying that such an individual life is non-physical, and not *necessarily* bound up with the fortunes of the body.

There is also a freedom from the control of social or cosmic *moral* laws. There is a sense in which every individual is morally a law unto himself. This means only that his action cannot be explained altogether by the larger purposes which embrace him along with others. That there are such larger purposes, and that they are effectual, will not, I think, be disputed by anyone who admits that purposes are effectual at all. But social purposes grow out of individual purposes, and never wholly assimilate them. It is no more possible to explain a man's action fully in terms of the motives which actuate a social aggregate, than it is possible to explain any physical event wholly in terms of the laws, if there be such, that determine all physical events. The pluralistic character of the universe is reflected in life. Interests, like other things, are more or less bound together. Indeed, in this case, unity is more an advantage to be sought, than a necessity to be deprecated.

The Grounds of Religious Belief

§ 8. All religion of the positive and hopeful type is based on the belief that the good will prevail. As James has so successfully and so eloquently urged, this does not necessarily mean that the very *being* of things is grounded in their goodness. If such were the case, realism would, of all philosophies, yield least comfort to religion. For realism explicitly repudiates every spiritual or moral *ontology*. But there is another meaning of religious optimism, that is not less comforting for being less extravagant. According to this second meaning, religious belief is a confidence that what is indifferent will acquire value, and that what is bad will be made good — through the operation of moral agents on a preëxisting and independent environment.

We have already found support for this belief in the fact that the good is both objectively real and actually operative. There is promise and not discouragement in the fact that nature has yielded life; and in the fact that life, once established, has imposed its interests upon the environment. Were it necessary that the good should triumph only in the breach of mechanical law, then the growth of science would indeed be ominous. But life triumphs in and through mechanical law. The systems of nature enter intact into the systems of life. The temporal antecedence of mechanism is in no way prejudicial to the subsequent ascendency of life. If life can have established itself at all, it can by the same means enlarge its domain. And if interests can have freed themselves as they have from preoccupation with immediate bodily exigencies, they can by a further and like progression still further reduce the tribute which they pay to the once omnipotent environment.

There is in fact such a forward movement of life. It becomes freer and more powerful with time. The forms of life which are most cherished—intellectual activity, the exercise of the sensibilities, and friendly social intercourse — are the very forms of life which are capable of maintaining and promoting themselves. "If," says a living scientist, "we make a curve of the ascent of vertebrates, . . . we find that, as the curve ascends, the ordinates of marital affection, parental care, mutual aid, and gentler emotions generally are, on the whole, heightened step by step. That organisms so endowed should survive, in spite of the admitted egoistic competition that is rife, is nature's sanction. The earth is the abode of the strong, but it is also the home of the loving."[1] And that which is true of the development of animal life at large, is true in greater measure of the development of human life. The liberalization and betterment of life through the agencies of civilization — the diversification and refinement of interests, the organization and solidification of society, and above all the growth of reason — is at the same time the guarantee of its stability and further expansion.

The Hazard of Faith

§ 9. It is customary to assume that if man cannot be proved to have possessed the world from the beginning, he must renounce hope of possessing it in the end. Thus Mr. Russell apparently infers that if "Man is the product of causes which had no prevision of the end they were achieving," then it must follow that his life is "brief and powerless," that "on him and all his race the slow, sure doom falls pitiless and dark."

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[1] J. Arthur Thomson and Patrick Geddes: "A Biological Approach," in *Ideals of Science and Faith*, edited by J. E. Hand, pp. 69–70.

The rigorous and truth-loving mind will sacrifice hope on the altar of science, and get what comfort it can from the emancipation and freedom of reason. In this spirit Darwin wrote: "The safest conclusion seems to me that the whole subject is beyond the scope of man's intellect; but man can do his duty." And to-day, in the name of the logical method and the realistic metaphysics, Mr. Russell concludes that "for man . . . it remains only to cherish, ere yet the blow falls, the lofty thoughts that ennoble his little day; . . . proudly defiant of the irresistible forces that tolerate, for a moment, his knowledge and his condemnation, to sustain alone, a weary but unyielding Atlas, the world that his own ideals have fashioned despite the trampling march of unconscious power."[1]

That such a philosophy of life is more admirable than superstition, sentimentalism, or complacent optimism, few will deny. But if martyrdom is to be proclaimed as a gospel for men, it must be more than courageous; it must be in the best sense wise and profitable. The conviction that the abandonment of religious hope is the supreme moral of science and philosophy, must rest entirely upon the supposition that consciousness is impotent. It must be supposed that interests and ideals can do no more than create "a new image of shining gold," a dream of better things, with which for the moment to embroider that "outward rule of Fate," which no living hand can stay.[2] But if ideals *work*, if consciousness, instead of creating the mere toys and playthings of the imagination, does actually make things good; then renunciation is as fatuous and unreasonable as it is gratuitous.

It is true that the claims of religious optimism cannot be proved. But neither can it be proved "that all the labours of the age, all the devotion, all the inspiration, all the noonday brightness of human genius, are destined to extinction in the vast death of the solar system, and that the whole temple of Man's achievement must inevitably be buried beneath the *debris* of a universe of ruins."[1] To pretend to speak for the universe in terms of the narrow and abstract predictions of astronomy, is to betray a bias of mind that is little less provincial and unimaginative than the most naïve anthropomorphism. What that residual cosmos which looms beyond the border of knowledge shall in time bring forth, no man that has yet been born can say. That it may overbalance and remake the little world of things known, and falsify every present prophecy, no man can doubt. It is as consistent with rigorous thought to greet it as a promise of salvation, as to dread it as a portent of doom. And if it be granted that in either case it is a question of over-belief, of the hazard of faith, no devoted soul can hesitate. Justified by the victories already won, he will with good heart invite his will to the completion of the conquest.

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[1] B. Russell: "A Free Man's Worship," in *Philosophical Essays*, pp. 60, 70; Darwin: *Life and Letters*, Vol. I, pp. 276–277.

[2] Russell: *op. cit.*, p. 66. For a similar view of the idealizing but impotent function of consciousness, cf. G. Santayana, *Life of Reason*, Vol. I (*Reason in Common Sense*), Ch. IX.

There is nothing dispiriting in realism. It involves the acceptance of the given situation as it is, with no attempt to think or imagine it already good. But it involves no less the conception of the reality and power of life. It is opposed equally to an idealistic anticipation of the victory of spirit, and to a naturalistic confession of the impotence of spirit, In this sense all bold and forward living is realistic. It involves a sense for things as they are, an ideal of things as they should be, and a determination that, through enlightened action, things shall in time come to be what they should be.

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[1] Russell: *op. cit.*, pp. 60–61.

APPENDIX

THE PHILOSOPHY OF WILLIAM JAMES[1]

I. Philosophy of Mind

The Place of the Problem of Mind in James's Philosophy

§1. A philosophy so complete and so significant as that of William James, touching, as it does, every traditional problem, and expressing through the medium of personal genius the characteristic tendencies of an epoch, cannot be hastily estimated. There is no glory to be won by pressing the attack upon its unguarded defences; while solemn verdicts, whether of commendation or censure, would surely prove premature and injudicious. But there is perhaps one service to be rendered to James and to philosophy for which this is the most suitable time, the service, namely, of brief and proportionate exposition. Every philosophical system suffers from accidental emphasis, due to the temporal order of production and to the exigencies of controversy. Towards the close of his life, James himself felt the need of assembling his philosophy, and of giving it unity and balance. It was truly one philosophy, one system of thought, but its total structure and contour had never been made explicit. That James should not have lived to do this work himself is an absolute loss to mankind, for which no efforts of mine can in the least compensate.[2] But I should like to make a first rude sketch, which may, I hope, despite its flatness and its bad drawing, at least suggest the form of the whole and the proper emphasis of the parts.

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[1] Reprinted from the *Philosophical Review*, Vol. XX, 1911; and from *The Harvard Graduates' Magazine*, Vol. XIX, 1910.

[2] James left an unfinished "Introduction to Philosophy," in which he had made a beginning of a systematic restatement of his thought; but owing to its incompleteness it does not, as it stands, afford the reader the total view which was in the author's mind as he composed it. It has been published since his death under the title, *Some Problems of Philosophy*.

If one could read James's writings in a day, and forget the order of their publication, one would, I think, find that they treated of three great topics—the nature of the human mind, the structure and criteria of knowledge, and the grounds of religious belief. Were one then to take into consideration the writer's development, together with his interests and his aptitudes, one would be brought to see that the first of these topics was original and fundamental. James's philosophy was a study of man, or of life. The biological and medical sciences, psychology, philosophy proper, and religion, were not for him so many independent disciplines, from which he chose now one and now another owing to versatility or caprice; but so many sources of light concerning human nature. So that while one has difficulty in classifying him within a curriculum or hierarchy of the sciences, since he ignored such distinctions and even visited the intellectual under-world when it suited his purpose, his mind was none the less steadily focussed on its object. His knowledge was on the one hand as unified, and on the other hand as rich and diversified, as its subject-matter. In the summary which follows I shall first give an account of his general views of the human mind; after which I shall discuss his view of man's great enterprises, knowledge, and religion.

Mind as Interested and Selective

§2. In one of his earliest published articles, on "Spencer's Definition of Mind,"[1] James adopts a standpoint which he never leaves. His object is man the organism, saving himself and asserting his interests within the natural environment. These interests, the irreducible "teleological factor," must be the centre and point of reference in any account of mind. The defect in Spencer's view of mind as correspondence of "inner" and "outer" relations, lies in its failing to recognize that such correspondence is relative to the organism's interests. "So that the Spencerian formula, to mean anything definite at all, must, at least, be re-written as follows: 'Right or intelligent mental action consists in the establishment, corresponding to outward relations, of such inward relations and reactions as will favor the survival of the thinker, or, at least, his physical well-being.'"[2] The mind is not a "mirror" which passively reflects what it chances to come upon. It initiates and tries; and its correspondence with the "outer world" means that its effort successfully meets the environment in behalf of the organic interest from which it sprang. The mind, like an antenna, feels the way for the organism. It gropes about, advances and recoils, making many random efforts and many failures; but is always urged into taking the initiative by the pressure of interest, and doomed to success or failure in some hour of trial when it meets and engages the environment. Such is mind, and such, according to James, are all its operations. These characters, interest, activity, trial, success, and failure, are its generic characters when it is observed concretely; and they are the characters which should take precedence of all others in the description of every special undertaking of mind, such as knowing, truth-getting, and believing.

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[1] *The Journal of Speculative Philosophy*, Vol. XII, Jan., 1878.

[2] *Loc. cit.*, p. 5.

The action of the mind is not, however, creative. Its ideas are not of its own making, but rather of its own *choosing*. At every stage of its development, on every level of complexity, the mind is essentially a selective agency, "a theatre of simultaneous possibilities."[1] The sense-organs select from among simultaneous stimuli; attention is selective from among sensations; morality is selective from among interests. And above all, thought is selective. The unity and discreteness of "things" first arises from interest in some special group of qualities, and from among the group the mind then selects some to represent it most truly as its "essential" characters. Reasoning is not the mere mechanism of association. Garrulousness in which the course of ideas is allowed to proceed as it will, is unreason, a symptom of mental decay. To reason is to guide the course of ideas, through discriminating and accentuating those whose associates are to the point. Human sagacity and genius, as well as the whole overwhelming superiority of man to brute, are to be attributed to a capacity for extracting the right characters from the undifferentiated chaos of primeval experience; the right characters being those which are germane to the matter in hand, or those which enable the mind to pass to similars over a bridge of identities.[2]

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[1] *Principles of Psychology*, Vol. I, p. 288.

[2] *Op. cit.*, Ch. V, IX, XIII, XIV, XXII. Cf. especially, Vol. I, pp. 284–290; Vol. II, pp. 329–366.

The Relational or Functional Theory of Consciousness

§3. Let us now look at mind from a somewhat different angle. If its operations are selective rather than creative it follows that it derives its content from its environment, and adds nothing to that content save the circumstance of its selection. If the term 'consciousness' be used to designate the mind's content, that manifold, namely, which can be held in view and examined by introspection, then consciousness is not a distinct substance, or even a distinct quality; but a grouping, exclusive and inclusive, of characters borrowed from the environment. James first offered this account of the matter in the article entitled, "Does Consciousness Exist?" published in 1904. But he then wrote: "For twenty years past I have mistrusted 'consciousness' as an entity; for seven or eight years past I have suggested its non-existence to my students."[1] This theory is therefore both closely related to his other theories, and also of long standing.

In suggesting the non-existence of consciousness, James meant, of course, to prepare the way for an account of its true character. This turn of thought may perhaps be paraphrased as follows. If by a thing's existence you mean its separate existence, its existence as wholly other than, or outside of, other things, as one planet exists outside another, then consciousness does not exist. For consciousness differs from other things as one grouping differs from another grouping of the same terms; as, for example, the Republican party differs from the American people. But this is its true character, and in this sense it exists. One is led to this conclusion if one resolutely refuses to yield to the spell of words. What do we find when we explore that quarter to which the word 'consciousness' directs us? We find at first glance some particular character, such as blue; and at second glance another particular character, such as roundness. Which of these is consciousness? Evidently neither. For there is no discoverable difference between these characters, thus severally regarded, and certain parts of nature. Furthermore, there is no discoverable community of nature among these characters themselves. But continue the investigation as long as you please, and you simply add content to content, without finding either any class of elements that belong exclusively to consciousness, or any conscious "menstruum" in which the elements of content are suspended. The solution of the riddle lies in the fact that one term may be called by several names corresponding to the several relationships into which it enters. It is necessary only to admit that "every smallest bit of experience is a *multum in parvo* plurally related, that each relation is one aspect, character, or function, way of its being taken, or way of its taking something else; and that a bit of reality when actively engaged in one of these relations is not *by that very fact* engaged in all the other relations simultaneously. The relations are not *all* what the French call *solidaires* with one another. Without losing its identity a thing can either take up or drop another thing, like the log . . . which by taking up new carriers and dropping old ones can travel anywhere with a light escort."[1]

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[1] *Journal of Phil., Psych., and Sc. Methods*, Vol. I, 1904, p. 477. The article has been reprinted in *Essays in Radical Empiricism*, I.

I have quoted this passage in full because of its far-reaching importance. But we have to do here only with the application to the question of consciousness. The elements or terms which enter into consciousness and become its content may now be regarded as the same elements which, in so far as otherwise related, compose physical nature. The elements themselves, the "materia prima" or "stuff of pure experience," are neither psychical nor physical.[2] A certain spatial and dynamic system of such elements constitutes physical nature; taken in other relations they constitute "ideal" systems, such as logic and mathematics; while in still another grouping, and in a specific functional relation, they make up that process of reflective thought which is the subject under discussion in the author's theory of ideas and of truth. The grouping or pattern which is most characteristic of the *individual* consciousness as such, is best described in connection with "the experience of activity."

But before turning to this topic it is important to call attention to a further corollary which is capable of a very wide application. The common or 'neutral' elements of pure experience serve not only to connect consciousness with the various objective orders of being, but also to connect different units of consciousness with another. Two or more minds become co-terminous and commutable through containing the same elements. We can thus understand "how two minds can know one thing."[1] In precisely the same way the same mind may know the same thing at different times. The different pulses of one consciousness may thus overlap and interpenetrate. And where these pulses are successive, the persistence of these common factors, marginal in one and focal in the next, gives to consciousness its peculiar connectedness and continuity. There is no need, therefore, of a synthesis *ab extra;* there is sameness and permanence and universality within the content itself. Finally, just as several individual minds, and the several moments of one individual mind, are "co-conscious," so there is no reason why human minds should not be "confluent in a higher consciousness."[2]

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[1] *Pluralistic Universe*, pp. 322—323. Cf. *Essays in Radical Empiricism*, p. 140.

[2] Cf. below, pp. 364-365.

The Experience of Activity

§ 4. A certain grouping of the elements of experience, a grouping in which activity and affectional states are the most marked characteristics, constitutes "the individualized self." "Simon pure activity," or "activity *an sich*," is a fictitious entity. But we are not on that account to banish the word 'activity' from our philosophical vocabulary, since there is a specific experience-complex for which it may be rightly and profitably used. "If the word have any meaning it must denote what there is found. . . . The experiencer of such a situation possesses all that the idea contains. He feels the tendency, the obstacle, the will, the strain, the triumph, or the passive giving up, just as he feels the time, the space, the swiftness or intensity, the movement, the weight and color, the pain and pleasure, the complexity, or whatever remaining factors the situation may involve."[3] This specific train or pattern of experiences being taken to constitute activity, it will constitute "my" activity in so far as it is accompanied by certain affectional states; in other words, in so far as it centres in certain experiences of my own body. For affectional states are quasi-bodily. They do not belong exclusively either to the mental or to the physical order. That which is attractive or repugnant stirs the body as well as the mind. "The 'interesting' aspects of things" rule the consecution of our several conscious streams; but they are "not wholly inert physically, though they be active only in those small corners of physical nature which our bodies occupy."[1] The individualized self is thus a peculiar assemblage or field of elements, which "comes at all times with our body as its centre, centre of vision, centre of action, centre of interest. . . . The body is the storm centre, the origin of coördinates, the constant place of stress in all that experience-train. Everything circles round it, and is felt from its point of view. The word 'I,' then, is primarily a noun of position, just like 'this' and 'here.' Activities attached to 'this' position have prerogative emphasis. . . . The 'my' of them is the emphasis, the feeling of perspective-interest in which they are dyed."[2]

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[1] *Op. cit.*, pp. 123 sq.

[2] *Pluralistic Universe*, p. 290, cf. Lecture VII, *passim*. For the development of James's view concerning the "compounding of consciousness," cf. *Principles of Psychology*, Vol. I, pp. 160, 161; "The Knowing of Things Together," *Psych. Rev.*, Vol. II, 1895; *Pluralistic Universe*, Lecture V.

[3] "The Experience of Activity," in *Pluralistic Universe*, pp. 380, 376–377.

Precisely as there is no consciousness *an sich*, and no activity *an sich*, so there is no mental power or "effectuation" *an sich*. The causality of mind lies in the drama, train, conjunction, or series, which is peculiar to the mind-complex. "Sustaining, persevering, striving, paying with effort as we go, hanging on, and finally achieving our intention — this *is* action, this *is* effectuation in the only shape in which, by a pure experience-philosophy, the whereabouts of it anywhere can be discussed. . . . Real effectual causation . . . is just that kind of conjunction which our own activity-series reveal."[3] We meet here with a type of process that is *sui generis*. Whether human action is determined primarily by this process, or by the elementary processes of the nerve-cells, James does not attempt to decide. It is essentially a question between the activities of longer and of shorter span; "naïvely, we believe, and humanly and dramatically we like to believe," that the two are at work in life together.[4]

If we assemble these various aspects of mind, we can picture it in its concrete wholeness. The organism operates interestedly and selectively within its natural environment; and the manifold of elements thus selected compose the mind's content. But this content, when viewed by itself, exhibits certain characteristic groupings, patterns, and conjunctions. Of these the knowledge process is the most striking But as the body is the original instrument of selection and the source of individual bias, so bodily states and bodily orientation will be the nucleus of each individual field of content.

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[1] "The Place of Affectional Facts in a World of Pure Experience," *Essays on Radical Empiricism*, pp. 150–151, and *passim*.

[2] *Pluralistic Universe*, p. 380, note.

[3] *Ibid.*, pp. 390, 392. For the bearing of this on the question of freedom, see below, p. 373.

[4] *Ibid.*, p. 387.

II. THEORY OF KNOWLEDGE

The Function of Cognition

§ 5. To understand the originality and value of James's contributions to this subject, it is indispensable that one should see his problem. One must respect the difficulty before one can appreciate his solution of it. James's problem can perhaps be formulated as follows: How can idea and object be *two*, and yet one be knowledge *of* the other, and both fall within the same individual conscious field? And this problem James proposes to solve empirically, that is, by an examination of cognition in the concrete. Just what is it that takes place, just what is found, when I have an idea of an object?

Although James's discussions of knowledge relate mainly to this dual or mediated type, to knowledge about the thing *b*, which I have by virtue of the idea *a*, he does not regard this as the only type or as the standard type. "Knowledge about" is a derivative of "direct" knowledge, or "knowledge of acquaintance," and is never more than a provisional substitute for it. Representation is cognitive only in so far as it is a virtual presentation. In direct knowledge, or knowledge of acquaintance, "any one and the same *that* in experience must figure alternately as a thing known and as a knowledge of the thing, by reason of two divergent kinds of context into which, in the general course of experience, it gets woven."[1] In knowledge of this type, in other words, the thing *itself* is acted on and felt about in the manner characteristic of an individual conscious field. The most notable case of this is sense-perception. In so far as there is here any difference between the knowing and the known, the knowing is simply the context, the company into which the thing known is received. And the individual knower will be that nuclear bodily complex which has already been described. The function of such knowledge is evidently to get things thus directly acted on, or thus directly introduced into life.

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[1] "Essence of Humanism," in *The Meaning of Truth*, p. 127. Cf. *passim*, and "Function of Cognition," *ibid.*, pp. 1–42.

But, humanly speaking, if the range of life is not to be narrowly circumscribed, it is necessary that most things should appear in it vicariously, that is, represented by what is known "about" them. "The towering importance for human life of this kind of knowing lies in the fact that an experience that knows another can figure as its *representative*, not in any quasi-miraculous 'epistemological' sense, but in the definite practical sense of being its *substitute* in various operations."[1] Thus the function of "knowledge about" is to provide substitutes for things which it is practically impossible to know directly, so that the original function of knowledge may be widely extended. It is only a special case of that which is characteristic of all organized life — namely, the broadening of its scope by delegation and indirection. And we are thus brought to the consideration of a narrow and definite problem. *When may one item be, for cognitive purposes, substituted for another?* That which may thus be substituted is "knowledge about," or "idea of," the thing for which it is so substituted; and the thing for which the substitution is made is the object. So that our question is equivalent to the traditional question, 'What is the relation between an idea and its object?' But it is important to bear in mind that James's question cannot be answered simply by saying that idea and object are identical. That in many cases they are identical, and that in all cases they are virtually identical, he does not deny. But he asks particularly about *that respect in which they are not identical;* where there is an actual otherness of content, or an actual temporal progression from the one to the other. And it must also be remembered also that James does not permit himself to deal with this question on other than empirical grounds; in other words, he assumes that all the terms referred to must be such as can be brought together within one field of consciousness.[2] The older dualism, in which the something

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[1] *Essays in Radical Empiricism*, p. 60.

[2] For the meaning of "empiricism," see below, pp. 363–366.

'inside' represents something 'outside' every possible extension of the individual's consciousness, is regarded as obsolete.[1]

The relation characteristic of an idea and its object can be analyzed into two factors, *intention* and *agreement*.[2] In the first place, the idea must somehow "mean" its object, that is, designate which thing is its object. And intention is prior to agreement. It is not sufficient that an idea should simply agree with something; it must agree with *its* object; and until its object has been identified, no test of agreement can be applied. "It is not by dint of discovering which reality a feeling 'resembles' that we find out which reality it means. We become first aware of which one it means, and then we suppose that to be the one it resembles."[3] But intention is essentially a practical matter. What one intends is like one's goal or one's destination, in being what one's actions converge on or towards. And the idea owes its existence, as such, to an intention or plan of action of which the 'intended' is the terminus. Intention is, of course, often equivocal; but the intention is revealed, and becomes less and less equivocal as the plan of action unfolds. It is this which accounts for the superiority of gesture over words. If one can hold up the object, lay one's hand on it, or even point to it, its identity becomes unmistakable.[4] So we must conclude that where the action on the object is not completed, the object is intended in so far as there is an incipient train of action which, if completed, would terminate in that thing. I may here and now have an idea of "the tigers in India," that is, mean, intend, or refer to them, inasmuch as what is in my mind is so connected circumstantially with the actual India and its tigers, that if I were to follow it up I should be brought face to face with them.[5] In other words, to have an idea of a thing is to have access to it, even when it is not present.

But an idea must not only intend its object; it must also, in some sense, "agree" with it. And here again we find that the essential thing is *practical connection;* for identity, or even similarity, is evidently not necessary. "We are universally held both to intend, to speak of, and to reach conclusions about — to know, in short — particular realities, without having in our subjective consciousness any mind-stuff that resembles them even in a remote degree. We are instructed about them by language which awakens no consciousness beyond its sound; and we know *which* realities they are by the faintest and most fragmentary glimpse of some remote context that they may have, and by no direct imagination of themselves."[1] Since it is not always necessary that the idea should resemble its object, we must conclude that the minimum agreement which is required of all ideas cannot be resemblance. And we shall understand that minimum agreement best where it is barest, where it is not complicated by the accident of agreement. The best example, then, will be the agreement of words with their objects. Now a word agrees with its intended object inasmuch as by an established convention it leads to that object, or enables one to find it. And what is true of single words will also be true of combinations of words; they will "agree," when they are so connected with a combination of things as to enable one to reverse the verbalizing operation and substitute that combination of things for them. But since it is possible that my idea should *not* prepare me for what it intends, it is evident that we are already within the domain of truth and error; agreement being the same thing as truth, and disagreement the same thing as error. And this is a matter for special and detailed examination.

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[1] *Meaning of Truth*, pp. 126–127.

[2] "Function of Cognition," *op. cit.*, *passim*, and especially pp. 28–32.

[3] *Ibid.*, p. 25.

[4] Cf. *ibid.*, pp. 25, 35; also "Meaning of the Word Truth," *op. cit.*, p. 217.

[5] *Op. cit.*, pp. 43–50.

Before leaving the present topic, however, it is worth while once more to point out that for James all knowledge is virtually direct or presentative. First, the safest and surest of our everyday knowledge is sense-perception. Second, while it is not necessary that the idea should resemble its object, the idea will ordinarily be some fragment of the object, abstracted and made to serve for the whole. And in so far as this is the case the idea and its object are identical. Third, even mediated knowledge is completed only when by means of it the object is brought directly into the mind. So that the best idea would be that which would "lead to an actual merging of ourselves with the object, to an utter mutual confluence and identification."[2] In other words, knowledge, generally speaking, is the entrance of things belonging otherwise to nature or some ideal order, into the context of the individual life. Mediated knowledge, in which there is a difference and an extrinsic connection between the idea and its object, is incidental to knowledge thus defined; a means, simply, of extending its scope by the method of substitution.

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[1] "Function of Cognition," *op. cit.*, pp. 30–31.

[2] "A Word More about Truth," *op. cit.*, p. 156.

The Pragmatic Nature of Truth

§ 6. The function of knowledge reveals the *locus* of the problem of truth. Truth is something which happens to ideas owing to their relation to their objects, that is, to the things which they are 'about.' Ideas are true 'of' their objects, it being assumed that the objects are both different from the beliefs and intended by them. The pragmatic theory of truth means nothing except so far as applied to this particular situation. If the specific complexity of the situation be not taken account of, then the theory becomes labored and meaningless. James convicts most of the objectors to pragmatism of overlooking, or over-simplifying, this problem. If one identifies truth with fact, one is simply ignoring James's question as to how one fact can be true *of* another, as is supposed to be the case in all mediated knowledge. If one says that true beliefs are beliefs in true propositions, truth being an indefinable property of some propositions, one is evading the troublesome question as to what is meant by belief *in;* and one is neglecting the fact that in nearly all actual knowledge the content of the believing state, or *what* is believed, differs from that which it is believed *about.* So that James's question will simply reappear as the question how a true belief about a 'true proposition' (in the opponent's sense) differs from a false belief about that same proposition. Or, finally, if one defines truth in terms of a hypothetical omniscience, one transfers the problem to a domain where its empirical examination is impossible, and meanwhile leaves untouched the question of that human truth that can be empirically examined, including the truth of the hypothesis of omniscience.[1]

Let us, then, resort to that corner of the world to which James's question invites attention. We find, on the one hand, something belonging, let us say, to the realm of physical nature. We find, on the other hand, some particular individual's particular belief, idea, or statement with reference to that thing. What, then, do we find to be characteristic of the idea in so far as true of the thing? We are not asking for a recipe for the making of truth; still less for an infallible recipe. We desire only to understand "what the *word* 'true' *means*, as applied to a statement"; "what truth actually *consists of*"; "the relation to its object that makes an idea true in any given instance."[1] We shall be faithful to James's meaning if we articulate the situation expressly. Let *b* represent a certain individual thing, assumed to exist; and let *a* represent somebody's idea of *b*, also assumed to exist. *a* may be similar to *b*, or dissimilar; but in any case, it must 'intend' *b*, in the manner already defined. It should also be remarked that *a* and *b* belong to one manifold of experience, in the sense that the same individual mind may proceed from the one to the other. Our question, then, is this: When is *a* true of *b?* The pragmatist answer is as follows:[2] *a* owes its existence as an idea to some interest; if there were no interested minds at work in the world, then the world would consist only of *b*'s.[3] Ideas, whether they be mere conventional signs for things or selected aspects of things, arise only because of some practical motive. Furthermore, the relation of intention which connects an idea with some thing and makes that thing *its* object, is due to the same interest or motive which selected the idea.[4] Finally, then, *a* is true of *b*, when this interest which selected *a* and related it to *b*, is *satisfied*. In short, *a* is true of *b*, when it is a successful ideating of *b*.[5]

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[1] The volume entitled *The Meaning of Truth* is devoted almost entirely to the removal of these misapprehensions. Cf. especially the Preface, and Nos. VI, VIII, IX, and XIV.

We shall gain in clearness and explicitness if we now distinguish the cases of *applied* and *theoretical* truth. We may suppose *a* to arise, first, as a mode of conceiving *b* for some use to which *b* is to be put. Then, when by virtue of the conception *a* I am enabled to handle or control *b*, and reach the desired end by so doing, I have a true idea of *a*, in the applied sense. This kind of truth is much the more common. If we include such knowledge as animals possess, and all of that human competence and skill which is not exactly formulated — all of the art which is not science — it is evident that in bulk it far exceeds the knowledge which is immediately related to the theoretical motive.

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[1] *Op. cit.*, pp. 221, 234, 235.

[2] This is not a close paraphrase of any portion of the text, but is arrived at by using the polemical statement in *The Meaning of Truth* to give greater precision to the constructive statement in Lect. VI of *Pragmatism.*

[3] See above, pp. 350–351.

[4] See above, p. 358.

[5] This success may be actual or potential. What James means by "potential" is clearly stated in *Meaning of Truth*, p. 93. But in any case truth cannot be defined without reference to the success.

But pragmatism is not intended as a disparagement of theory. James naturally resents the description of it "as a characteristically American movement, a sort of bobtailed scheme of thought, excellently fitted for the man on the street, who naturally hates theory and wants cash returns immediately."[1] Indeed, owing to the emphasis given the matter by the turn of controversy, the pragmatist writers have devoted a somewhat disproportionate amount of space to the discussion of theoretical truth. That the theoretical process is itself interested in its own way, that it has its characteristic motive and its characteristic successes and failures, is a fact that no one has ever questioned. And 'theoretical truth,' so-called, is its success. An idea is true theoretically, when it works for the theoretical purpose. It remains only to discover what that purpose may be. What, then, is the theoretical motive for the formation of ideas? Or what is the virtue of forming ideas of things, different from the things themselves, when there is no occasion for acting on the things? In order, the pragmatist replies, to have a compact and easily stored access to these things; in order to be able to find, should one want them, more things than there are room for within the mind at any one time. It follows, then, that the mark of a good idea, from this point of view, is its enabling one by means of it to come directly at a large number of particular facts which it means. Verification is thus the trying out, the demonstration, of an idea's capacity to lead to its objects and obtain their direct presentation to mind. Thus *a* is true of *b*, in the theoretical sense, when by virtue of having *a* in mind I can bring *b* into mind, *a* being more compact than *b*. And the adequacy of *a* will depend upon the extent to which it puts me in virtual possession of the full or complete nature of *b*. There is always a sense in which nothing can be so true of *b* as *b* itself, and were it humanly possible to know everything directly and simultaneously, as we know aspects of things in sense-perception, then there would be no occasion for the existence of ideas. But then there would be no truth, in the particular sense in which James uses the term.

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[1] *Meaning of Truth*, p. 185.

It is worth while to observe that when James defines truth in terms of satisfaction, he has in mind a very specific sort of satisfaction, a determined satisfaction, of which the conditions are imposed on the one hand by the environment, and on the other hand by the interest which called the idea forth.[1] This is by no means the same thing as to say that an idea which is satisfactory is therefore true. It must be satisfactory for a particular purpose, and under particular circumstances. An idea has a certain work to do, and it must do that work in order to be commended as true. There is a situation, again a special situation, in which the general usefulness or liveableness of an idea may be allowed to count towards its acceptance. But the case is exceptional, and is not necessarily implied in the pragmatic theory. I have thought it on the whole clearer and fairer, therefore, to consider it in another connection.[2]

The pragmatic theory of truth is closely connected in the author's mind with "the pragmatic method." It emphasizes the particular and presentable consequences of ideas, and is thus opposed to verbalism, to abstractionism, to agnosticism, and to loose and irrelevant speculation. But pragmatism here merges into empiricism, where the issues are wider and more diverse.

Empiricism

§ 7. James was an empiricist in the most general sense, in that he insisted on the testing of an idea by a resort to that particular experience which it means. An idea which does not relate to something which may be brought directly before the same mind that entertains the idea, is not properly an idea at all; and two ideas are different only in so far as the things to which they thus lead differ in some particular respect. "The meaning of any proposition can always be brought down to some particular consequence in our future practical experience, whether passive or active . . . the point lying rather in the fact that the experience must be particular than in the fact that it must be active."[1] Similarly, "the whole originality of pragmatism, the whole point in it, is its use of the concrete way of seeing."[2] Empiricism, or pragmatism, in this sense, is essentially an application of James's theory of the function of ideas. Since it is their office to pave the way for direct knowledge, or to be temporarily substituted for it, their efficiency is conditioned by their unobtrusiveness, by the readiness with which they subordinate themselves. The commonest case of an idea in James's sense is the word, and the most notable example of his pragmatic or empirical method is his own scrupulous avoidance of verbalism. It follows that since ideas are in and of themselves of no cognitive value, since they are essentially instrumental, they are always on trial, and "liable to modification in the course of future experience."[3] The method of hypothesis and experiment is thus the method universal, and the canon of verifiability applies to philosophy as well as to science.

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[1] Cf. *op. cit.*, pp. 192 ff.

[2] See below, under "The Right to Believe," pp. 369–371.

Empiricism in a narrower sense is the postulate, "that the only things that shall be debatable among philosophers shall be things definable in terms drawn from experience."[4] We find experience itself described as "a process in time, whereby innumerable particular terms lapse and are superseded by others."[5] This cannot mean that experience is to be identified with the manifold of sense-perception, for he refers repeatedly to "non-perceptual experiences."[6] Nor can it mean that experience is to be identified with the *experienced*, that is, with consciousness. For consciousness, like matter, is a part of experience. Indeed, "there is no *general* stuff of which experience at large is made." "It is made of *that*, of just what appears, of space, of intensity, of flatness, brownness, heaviness, or what not. . . . Experience is only a collective name for all these sensible natures, and save for time and space (and, if you like, for 'being'), there appears no universal element of which all things are made."[7] Experience, then, is a colorless name for things in their spatial-temporal conjunctions. Things are *experience* when these conjunctions are immediately present in the mind; in other words, when they are directly known *here* and *now*, or when such a here-and-now knowledge is possible. In other words, we are again brought back to a fundamental insistence on direct or presentative knowledge. In respect of this insistence James is a lineal descendent of Berkeley, Hume, and Mill, and a brother of Shadworth Hodgson and Ernst Mach. In all of these writers the insistence on the immanence of the object of knowledge has tended to lead to phenomenalism; and James, like the rest, is a phenomenalist, in the sense of being opposed to dualism and transcendentalism. But in his later writings, at least, he has made it perfectly clear that while things are "what they are known as," they need not be known in order to be. Their being known is an accidental relation into which they directly enter as they are.[1] To limit knowledge to experience means only to limit it to what may be immediately apprehended as here and now, to what may be brought directly before the mind in some particular moment of its history.

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[1] *Meaning of Truth*, p. 210.

[2] *Op. cit.*, p. 216. For the more popular exposition of this method, and the illustrative application of it, cf. *Pragmatism*, Lectures II, III.

[3] *Will to Believe*, Preface, p. vii.

[4] *Meaning of Truth*, Preface, p. xii.

[5] *Ibid.*, p. 111.

[6] Cf. "Does Consciousness Exist?" *Essays in Radical Empiricism*, p. 17.

[7] *Ibid.*, pp. 26–27.

James's empiricism means, then, first, that ideas are to be tested by direct knowledge, and second, that knowledge is limited to what can be presented. There is, however, a third consideration which is both an application of these, and the means of avoiding a difficulty which is supposed to be fatal to them. This is what James calls "radical empiricism," the discovery that "the relations between things, conjunctive as well as disjunctive, are just as much matters of direct particular experience, neither more so nor less so, than the things themselves."[2] "Adjacent minima of experience" are united by the "persistent identity of certain units, or emphases, or points, or objects, or members . . . of the experience-continuum."[3] Owing to the fact that the connections of things are thus found along with them, it is unnecessary to introduce any substance below experience, or any subject above, to hold things together. In spite of the atomistic sensationalists, relations are found; and in spite of Mr. Bradley, relations *relate.* And since the same term loses old relations and acquires new ones without forfeiting its identity, there is no reason why a relation should not unite things and still be adventitious and variable. Thus the idealistic theory, which, in order that there may be *some* connection, conceives of a trans-experiential and immutable connection, is short-circuited.[1] This handling of the question of relation at the same time proves the efficacy of the empirical method, and the futility of "intellectualism."

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[1] Cf. "Does Consciousness Exist?" with "The Knowing of Things Together," *Psych. Rev.*, Vol. II, 1895. Cf. also below, p. 368.

[2] *Meaning of Truth*, preface, p. xii. Cf. *Pluralistic Universe*, pp. 279-280.

[3] *Pluralistic Universe*, pp. 326, 356. Cf. *Principles of Psychology*, Vol. I. p. 459.

Percepts and Concepts. The Critique of Intellectualism

§ 8. The critical application of James's theory of knowledge follows from his notion of conception and its relation to perception. "Abstract concepts . . . are salient aspects of our concrete experiences which we find it useful to single out."[2] He speaks of them elsewhere as things we have learned to "cut out," as "flowers gathered," and "moments dipped out from the stream of time."[3] Without doubt, then, they are elements of the given and independent world; not invented, but selected — and for some practical or theoretical purpose. To knowledge they owe, not their being or their natures, but their isolation or abstraction and the cognitive use to which they are put. This use or function tends to obscure the fact that they are themselves "objective." They have, as a matter of fact, their own "ideal" relations, their own "lines of order," which when traced by thought become the systems of logic and mathematics.[4]

The human importance of concepts and of ideal systems lies in their cognitive function with reference to the manifold of sense-perception. Therefore it is necessary to inquire just what kind of a knowledge of the latter they afford. Since they are extracts from the same experience-plenum, they may be, and to a large extent are, similar to their perceptual objects. But it is never the primary function of an idea to picture its object, and in this case, at least, a complete picturing is impossible. Because, in the first place, concepts are single and partial aspects of perceptual things, and never a thing's totality. Although conception exhibits these aspects clearly one by one, sense-perception, apprehending the thing all at once, or concretely, will, in spite of its inarticulateness, always convey something — it may be only the fullness of potential concepts — which conception misses. It would follow, then, that a concept is true of a percept only *so far as it goes*. But those who employ concepts are prone to use them "privatively," that is, as though they exhausted their perceptual object and prevented it from being anything more. This "treating of a name as excluding from the fact named what the name's definition fails positively to include," is what James calls "vicious intellectualism."[1]

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[1] Cf. "The Thing and its Relations," in *Pluralistic Universe*, pp. 347–369, *passim*. Cf. also above, p. 353, and below, pp. 373–374.

[2] *Meaning of Truth*, p. 246.

[3] *Pluralistic Universe*, p. 235. Cf. *Principles of Psychology*, on "Conception," and "Reasoning," Chapters XII and XXII.

[4] *Essays in Radical Empiricism*, pp. 15, 16. Cf. *Meaning of Truth*, pp. 42, 195, note; *Pluralistic Universe*, pp. 339–340; *Principles of Psychology*, Ch. XXVIII. Here as elsewhere of two apparently conflicting statements I have taken the later. The latest and best statement James's view of concepts is to be found in *Some Problems of Philosophy*, Ch. IV–VI.

But, in the second place, there is a more specific reason why concepts cannot adequately express the existential sense-manifold. Not only are they unequal to it because abstracted from it, but they are necessarily *unlike* it, in that the most characteristic aspects of the sense-manifold cannot be conveyed in conceptual form. This is the chief ground of James's indictment of intellectualism, and is of critical importance to the understanding of his philosophy. It is important once more to note that the cognitive use of ideas does not depend upon their similarity to their objects. They may be abstracted aspects of their objects, or they may be entirely extraneous bits of experience, like words, connected with their objects only through their functional office. Now it is James's contention that the most characteristic aspects of existence can be ideated only in this second way. They cannot be abstracted, they cannot themselves become the immediate objects of thought, although they can, of course, be led up to and functionally represented. Every bit of experience has "its quality, its duration, its extension, its intensity, its urgency, its clearness, and many aspects besides, no one of which can exist in the isolation in which our verbalized logic keeps it."[2] The error of intellectualism lies in its attempt to make up such aspects as these out of logical terms and relations. The result is either a ridiculous over-simplification of existence, or the multiplication of paradoxes. The continuity of change, the union of related things, the fulness of the existent world, has to be sensed or felt, if its genuine character is to be known, as truly as color has to be seen or music heard. So that, so far as these aspects of existence are concerned, concepts are useful for "purposes of practice," that is, to guide us to the sensible context, and not for "purposes of insight."[1]

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[1] *Pluralistic Universe*, p. 60. Cf. also pp. 218 ff., and *Meaning of Truth*, pp. 248, 249 ff.

[2] *Pluralistic Universe*, p. 256.

"Direct acquaintance and conceptual knowledge are thus complementary of each other; each remedies the other's defects."[2] Knowing is always in the last analysis witnessing — having the thing itself within the mind. This is the only way in which the proper nature, the original and intrinsic character, of things, is revealed. Thought itself is the means of thus directly envisaging some aspects of things. But owing to the peculiar conditions under which the mind operates, it is practically necessary to know most things indirectly. So thought has a second use, namely, to provide substitutes for aspects of things that can be known directly only by sense. The peculiar value of thought lies, then, in its direct grasp of the more universal elements, and in the range and economy of its indirect grasp of those elements which, in their native quality, can be directly grasped only by sense.

Knowledge in all its varieties and developments arises from practical needs. It takes place within an environment to whose independent nature it must conform. If that environment be regarded as something believed, then it signifies truth already arrived at obediently to the same practical motives. But if it be conceived simply as reality, as it must also be conceived, then it is prior to all knowledge, and in no sense involved in the vicissitudes of knowledge. In short, James's theory is epistemology in the limited sense. It describes knowledge without implying any dependence of things on the knowing of them. Indeed, on the contrary, it is based explicitly on the acceptance of that non-mental world-order which is recognized by common sense, by science, and by philosophical realism.[3]

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[1] *Op. cit.*, p. 290. Cf. Lectures V, VI, and VII, *passim.*

[2] *Op. cit.*, p. 251.

[3] Cf. *Meaning of Truth*, Preface, and pp. 190–197, 212–216.

III. Philosophy of Religion

The Right to Believe

§ 9. James's contribution to the study of religion is so considerable and so important as to stand by itself, beside his psychology and his philosophy. In the present meagre summary I shall deal only with what is directly related to the fundamentals of his philosophy, namely, to his theory of mind and his epistemology. Religion, like knowledge, is a reaction of man to his environment. Its motives are practical, and its issues, tests, and successes are practical. Religion is "a man's total reaction upon life." It springs from "that curious sense of the whole residual cosmos as an everlasting presence, intimate or alien, terrible or amusing, lovable or odious."[1] The positive or hopeful religion says "that the best things are the more eternal things," and "that we are better off even now" if we believe so.[2] There is a practical motive leading to some such belief, and there is an additional motive for taking the hopeful rather than the despairing view. Applying the theory of truth already expounded, it follows that that religious belief is true which satisfies the demands which give it birth. So far this might mean simply that it is important for life to have an idea of the ultimate nature of things, and as hopeful an idea as possible; in which case the true religion would be the idea which succeeded in meeting these requirements. It would be the verified hypothesis concerning the maximum of hopefulness which the universe justifies. But the case is not so simple as that. For no idea of the ultimate nature of things *can* be verified, that is, proved by following it into the direct presence of its object. And meanwhile it is practically necessary to adopt *some* such idea. So the question arises as to whether the general acceptability of an idea, including its service to other interests than the theoretical interest, may in this case be allowed to count. To accept an idea, or to believe under such conditions and on such grounds, is an act of faith. What, then, is the justification of faith?

Faith does not mean a defiance of proof but only a second best, a substitute where the evidence is not conclusive. "Faith means belief in something concerning which doubt is still theoretically possible; and as the test of belief is willingness to act, one may say that faith is the readiness to act in a cause the prosperous issue of which is not certified to us in advance."[1] If it can be certified in advance, so much the better; but if not, then it may be proper to act confidently none the less. Now such is the case, first when hesitation or suspension of action is equivalent to *disbelief* in a prosperous issue. Thus, "if I must not believe that the world is divine, I can only express that refusal by declining ever to act distinctively as if it were so, which can only mean acting on certain critical occasions as if it were *not* so, or in an irreligious way."[2] "Logical scrupulosity" may thus over-reach itself, and lead one to a virtual denial even in the face of probability. In the second place, there are "cases where faith creates its own verification." Belief in the success of an enterprise in which the believer is himself engaged breeds the confidence which will help to *make* success. And religion is such an enterprise. "Believe, and you shall be right, for you shall save yourself."[3]

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[1] *Varieties of Religious Experience*, p. 35. In the "Varieties" the topic is circumscribed for the sake of convenience; cf. p. 31.

[2] *Will to Believe*, pp. 25, 26.

In short, "there is really no scientific or other method by which men can steer safely between the two opposite dangers of believing too little or of believing too much."[4] We can neither limit belief to proof, for that would be to cut ourselves off from possibilities of truth that have a momentous importance for us; nor exempt our belief altogether from criticism, for that would be to forfeit our principal means to truth. There are genuine "options" for belief, options that are "live" in that there is an incentive to choose; and "forced," in that to decline to choose is still virtually to choose.[5] Where such an option exists, hope may be allowed to convert objective or theoretical probability into subjective certainty. And the one momentous case of this is religion.

§ 10. That religious belief which is at once most probable on theoretical grounds, and most rational in the broader sense of making a "direct appeal to all those powers of our nature which we hold in highest esteem,"[1] is theism. God is conceived as "the deepest power in the universe," and a power not ourselves, "which not only makes for righteousness, but means it, and which recognizes us."[2] "To coöperate with his creation by the best and rightest response seems all He wants of us."[3] Such an interpretation of the world most completely answers our needs. "At a single stroke, it changes the dead blank *it* of the world into a living *thou*, with whom the whole man may have dealings." "Our volitional nature must, then, until the end of time, exert a constant pressure upon the other departments of the mind to induce them to function to theistic conclusions."[4] Here, then, is the possible and the profoundly desirable religious truth. To neglect it is to disbelieve it, which is equally arbitrary, and involves all the practical loss besides; while to accept it is to help make it true, since human efforts may assist in establishing the supremacy of the good. But what evidence may be adduced in its support?

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[1] *Op. cit.*, p. 90; cf. p. 1; and *Meaning of Truth*, p. 256.

[2] *Will to Believe*, p. 55.

[3] *Op. cit.*, p. 97.

[4] *Op. cit.*, p. xi. Cf. p. 128.

[5] *Op. cit.*, p. 3. Cf. *Some Problems of Philosophy*, Appendix, on "Faith and the Right to Believe."

Reflex Action and Theism

The answer to this question consists partly in the removal of difficulties, such as the dogmatism of science, and the problem of "the compounding of consciousness,"[5] partly in the application to the religious experience of the theory of a "subconscious self." "We have in the fact that the conscious person is continuous with a wider self through which saving experiences come, a positive content of religious experience which, it seems to me, is literally and objectively true as far as it goes."[6] When we ask "how far our transmarginal consciousness carries us if we follow it on its remoter side," our "over-beliefs begin;" but the evidence afforded by mystical experiences, thus construed by means of an established psychological theory, creates "a decidedly formidable probability" in favor of the theistic hypothesis.[7]

§ 11. The belief in freedom, like the belief in God, cannot be proved. Here, again, belief has an option between a rigidly determined world and a world with alternative possibilities in it. Determinism "professes that those parts of the universe already laid down absolutely appoint and decree what the other parts shall be."[1] Indeterminism, on the other hand, means that several futures are really possible, in the sense of being compatible with the same past. After the fact the one sequel is as reasonable as the other, and the fact itself throws no light on the question whether "another thing might or might not have happened in its place."[2] For this reason, the facts themselves can neither establish determinism nor disprove it. And since the facts are not decisive, man is warranted in taking into account the grave practical issues that are at stake. If the hypothesis of freedom be true, it relieves man from what would otherwise be an intolerable situation; and if he fails to accept the hypothesis because his doubts are not entirely dispelled, he virtually chooses the alternative which is worse without being any more probable.

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[1] *Op. cit.*, p. 110. Cf. pp. 115–116.

[2] *Op. cit.*, p. 122.

[3] *Op. cit.*, p. 141.

[4] *Op. cit.*, p. 127.

[5] Cf. above, pp. 353–354.

[6] *Varieties of Religious Experience*, p. 515. Cf. also "The Energies of Men," *Memories and Studies*, X.

[7] *Op. cit.*, p. 513; *Pluralistic Universe*, p. 309.

The Dilemma of Determinism

From a moral or religious point of view a determined world is a world in which evil is not only a fact, as it must be on any hypothesis, but a necessity. "Calling a thing bad means, if it mean anything at all, that the thing ought not to be, that something else ought to be in its stead. Determinism, in denying that anything else can be in its stead, virtually defines the universe as a place in which what ought to be is impossible, — in other words, as an organism whose constitution is afflicted with an incurable taint, an irremediable flaw."[3] In such a universe there are only two religious alternatives, despair or renunciation — a hopeless complaint that such a world should be, or the cultivation of a subjective willingness that *anything* should be. To adopt the latter alternative, or "gnosticism," as the only course that will bring peace of mind, is "to abandon the judgment of regret," and substitute an intellectual, sentimental, or sensual condoning of evil for the healthy moral effort to eradicate it.[4] Indeterminism, on the other hand, is a doctrine of *promise* and *relief*.[5] It offers me "a world with a *chance* in it of being altogether good;" an escape from evil "by dropping it out altogether, throwing it overboard and getting beyond it, helping to make a universe that shall forget its very place and name."[1]

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[1] "Dilemma of Determinism," in *Will to Believe*, p. 150; cf. *passim*.

[2] *Op. cit.*, p. 152. Cf. pp. 146, 156.

[3] *Op. cit.*, pp. 161–162.

[4] *Op. cit.*, pp. 162 ff.

[5] *Pragmatism*, pp. 119 ff.

Although the belief in freedom is in the end an act of faith, there is evidence for its possibility or even probability. Freedom is not incompatible with any uniformity that has been discovered, but only with the dogma that uniformity must be absolute even if it has not been found to be so. If there be any real novelty in the world, any respects in which the future is not merely an unfolding of the past, then that is enough to leaven the whole. In the case of freedom of the will all that is required is "the character of novelty in activity-situations." The "effort" or activity-process is the form of a whole "field of consciousness,"[2] and all that is necessary for freedom is that the duration and intensity of this process should not be "fixed functions of the object."[3] That the experience of activity should contribute something wholly new when it arises, is not only consistent with the facts ascertained by psychology, but is also in keeping with the general principles of radical empiricism. Old terms may enter into new relations; the unity of the world is not over-arching and static, but a continuity from next to next, permitting of unlimited change without disconnection and disorder. Indeterminism is thus no more than is to be looked for in a pluralistic universe.

Pluralism and Moralism

§ 12. Pluralism is essentially no more than the denial of absolute monism. "Absolute unity brooks no degrees"; whereas pluralism demands no more than that "you grant *some* separation among things, some tremor of independence, some free play of parts on one another, some real novelty or chance, however minute."[4] And pluralism in this sense follows directly from James's theory of knowledge. In the first place, absolute monism loses its authority the moment its a priori necessity is disproved. To account for knowledge empirically is to render all this elaborate speculative construction unnecessary. As a hypothesis it is not wholly out of the question,[5] but it will not bear comparison with pluralism for intellectual economy, and it brings a number of artificial difficulties in its train.[1] Second, there is positive evidence for the pluralistic hypothesis in the fact of "external relations." "It is just because so many of the conjunctions of experience seem so external that a philosophy of pure experience must tend to pluralism in its ontology." Relations may be arranged according to their relatively conjunctive or disjunctive character: "confluence," "conterminousness," "contiguousness," "likeness," "nearness" or "simultaneousness," "in-ness," "on-ness," "for-ness," "with-ness," and finally mere "and-ness." With its parts thus related the universe has still enough unity to serve as a topic of discourse, but it is a unity of "concatenation," rather than of "co-implication."[2]

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[1] *Op. cit.*, p. 297; *Will to Believe*, p. 178, and pp. 173 ff.

[2] *Pluralistic Universe*, p. 391, note. Cf. above, pp. 354–356.

[3] *Principles of Psychology*, Vol. II, p. 571. Cf. pp. 569–579, *passim.*

[4] *Pragmatism*, p. 160. Cf. Lecture IV, *passim.*

[5] *Will to Believe*, p. vii; *Pluralistic Universe*, p. 292.

The importance of such a conclusion for religious purposes is apparent. On the one hand, as we have already seen, evil is not necessarily implied by the rest of the universe, so that the universe as a whole is not compromised or irremediably vitiated by it. But, on the other hand, it must be admitted that the good is in a like position. The supremacy of the good is not guaranteed, but is only made possible, and is thrown into the future as a goal of endeavor. Pluralism "has no saving message for incurably sick souls."[3] It is no philosophy for the "tender-minded;" it makes life worth living only for those in whom the fighting spirit is alive.[4] In the Introduction to the *Literary Remains* of his father, James distinguished between the religious demand for an ultimate well-*being*, and that *healthy-minded moralism* in which "the life we then feel tingling through us vouches sufficiently for itself, and nothing tempts us to refer it to a higher source."[5] It is this note which dominates James's philosophy of life. It accounts for his relatively slight interest in immortality.[6] He did not feel the necessity of being assured in advance of his own personal safety. With his characteristic tenderness of mind where the interests of others were in question, he sympathized deeply with the more importunate and helpless cravings of the religious spirit. But for himself, he was "willing to take the universe to be really dangerous and adventurous, without therefore backing out and crying 'no play.'"[1] "The essence of good is simply to satisfy demand." But the tragic fact is, that demands conflict, and exceed the supply. Though God be there as "one of the claimants," lending perspective and hopefulness to life, the victory is not yet won. If we have the courage to accept this doubtful and perilous situation as it is, "there is but one unconditional commandment, which is that we should seek incessantly, with fear and trembling, so to vote and to act as to bring about the very largest total universe of good which we can see." [2]

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[1] *Meaning of Truth*, pp. 125 sq.

[2] *Pluralistic Universe*, pp. 321, 325; 359, 361. Cf. Lecture VIII, and Appendix A, *passim*. Cf. also above, p. 353.

[3] *Meaning of Truth*, p. 228.

[4] Cf. *Pragmatism*, Lecture I, and "Is Life Worth Living?" in *Will to Believe*.

[5] *Literary Remains of Henry James*, pp. 116–117.

[6] *Varieties of Religious Experience*, p. 524; *Human Immortality*, p. 3.

IV. Conclusion

These, I believe, are the bare essentials of James's philosophy, and the thread of reasoning by which they are connected. A summary such as this must altogether miss the pictorial and dramatic quality of his thought. That which is most characteristic of him cannot be restated; for his own style was its inevitable and only adequate expression. But I offer this rude sketch in the hope that it may help those who seek to apprehend this philosophy as a whole. James's field of study, the panoramic view within which all of his special problems fell, was the lot of mankind. On the one hand stands the environment, an unbidden presence, tolerating only what will conform to it, threatening and hampering every interest, and yielding only reluctantly and gradually to moral endeavor. On the other hand stands man who, once he gets on good terms with this environment, finds it an inexhausible mine of possibilities. "By slowly cumulative strokes of choice," he has extricated out of this, like a sculptor, the world he *lives* in. James never confused *the* world with man's world, but he made man's world, thus progressively achieved, the principal object of his study. Man conquers his world first by knowing it, and thus presenting it for action; second, by acting on it, and thus remoulding it to suit his purposes. But these operations are the inseparable parts of one activity through which a humanized and moralized world is developed out of the aboriginal potentialities. So philosophy becomes the study of man as he works out his salvation. What is his endowment and capacity? How does his knowing take place, and what are the marks of its success? What forms does reality assume as it passes through the medium of the human mind? What are the goods which man seeks? What are the grounds, and what is the justification, of his belief in ultimate success?

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[1] *Pragmatism*, p. 296.

[2] "The Moral Philosopher and the Moral Life," in *Will to Believe*, pp. 201, 212, 209, and *passim*.

The characteristics of James's mind were intimately connected with his conception of the mission of philosophy. He was distinguished by his extraordinary sense for reality. He had a courageous desire to know the worst, to banish illusions, to take life at its word, and accept its challenge. He had an unparalleled capacity for apprehending things in their human aspect, as they fill the mind, and are assimilated to life. So indefatigable was his patience in observing these conjunctions and transitions in their rich detail, that few of his critics have had patience enough even to follow his lead. True to his empirical ideals, he abandoned the easier and more high-handed philosophy of abstractions for the more difficult and less conclusive philosophy of concrete particulars. And finally, he had a sure instinct for humanly interesting and humanly important problems. He sought to answer for men the questions the exigencies of life led them to ask. And where no certain answer was to be had, since men must needs live notwithstanding, he offered the prop of faith. Making no pretence of certainty where he found the evidence inconclusive, he felt the common human need of forging ahead even though the light be dim. Thus his philosophy was his way of bringing men to the wisest belief which in their half-darkness they can achieve. He was the frank partizan of mankind, undeceiving them when necessary, but giving them the benefit of every doubt.

To attribute James's power to his genius is as much as to say that it escapes analysis. He was felt in his time as an original intellectual and spiritual force, that can no more be divided and inventoried than his philosophy can be distributed among the hackneyed classifications of the schools. It is easy to say that he owed much to his style; but it is plain that his style owed everything to him. He was, it is true, a lover of form, endowed with the finest sensibilities, and stirred by the creative impulse; but his style was always his instrument. He found it above all a means of communication; for nothing was more notable about him than the social quality of his thought. He wrote for his readers, his vivid imagination of their presence guiding him infallibly to the centre of their minds. And his style was also the means of faithfully representing his experience. It was figurative and pictorial, because the world he saw was a procession of concrete happenings, abounding in novelty and uniqueness. For his originality lay, not in his invention, but in the extraordinary freshness of his perception, and in an imagination which was freed from convention only to yield itself utterly to the primeval and native quality of the world as he found it. His thought was always of the actual world spread before him, of what he called "the particular facts of life." He relied little on dialectic, but brought his powers of observation into play where the traditional philosophy had abstracted the problem and carried it off into the closet. And to this first-hand acquaintance with particulars he added a keen zest for metaphysical speculation. He was curious, as the natural man is curious, loving the adventure of exploration, and preferring the larger riddles of existence to the purely technical problems of the schools.

His resources were by no means limited to the results of his own observation. He probably read more widely than any philosopher of his day. He did not, however, value erudition for its own sake, but only as a means of getting light. His reading was always selective and assimilative; he converted it at once into intellectual tissue, so that it gave him strength and buoyancy and never merely a burden to carry. And he learned from men as well as from books. Always governed by his likings rather than his aversions, generous and open-hearted, men who shrank from others gave their unsuspected best to him. In short, his mind was instinctively discriminating. He not only knew the good from the evil, but he was guided by a remarkably independent judgment of proportion. He was never led to accept a thing as important simply because it had acquired a certain professional or academic prominence; and he was rarely imposed on by the respectable humbug, though he opened his mind to whatever was humanly significant, even though it might be socially disreputable.

It is impossible to divorce his intellectual gifts from his character. His openmindedness, which has become proverbial, was only one of many signs of his fundamental truthfulness. Having no pride of opinion, and setting little store by his personal prestige, his mind remained flexible and hospitable to the end. His very modesty and guilelessness were sources of power. For his modesty was not a form of self-consciousness, but a preoccupation with things or persons other than himself. And his guilelessness was not a childlike naïveté, but a sincerity and openness of motive. He was possessed of a certain shrewdness and directness—an ability to come to the heart of affairs at a stroke — that made him the wisest of counselors. But he had no ambitions which he attempted to conceal, and no prerogatives of which he was jealous; so that he met his students and his friends with a natural simplicity and an entirely uncalculating indifference to distinctions of social eminence. He proved the possibility of possessing taste and personal distinction without pride or aloofness. And his democracy was a matter of conviction, as well as of impulse. He believed heartily in the institutions of his country, and shared those hopes of freedom, peace, and happiness, which unite men and nerve them to take part in the work of civilization.

James did not found a school. He was incapable of that patient brooding upon the academic nest that is necessary for the hatching of disciples. The number of those who borrowed his ideas is small and insignificant beside the number of those that through him were brought to have ideas of their own. His greatness as a teacher lay in his implanting and fostering of intellectual independence. He prized his own university for its individualism and tolerance, and for the freedom which it gave him to subordinate the scholastic office and the scholastic method to a larger human service. So the circle of his influence widened to the bounds of European civilization; while his versatility, his liberal sympathies, the coincidence of his ruling passions with the deeper interests of mankind at large, and above all the profound goodness of his heart, so diversified and humanized this influence that there were few indeed too orthodox or too odd to respond to it.

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